TEST RESULT SUMMARY

FCC Part 15 Subpart C Section 15.247
FCC Part 15 Subpart C Section 15.207
Industry Canada RSS-210 Issue 7
Industry Canada RSS-Gen Issue 2

MANUFACTURER'S NAME	GE Security Incorporated
MANUFACTURER'S ADDRESS	1275 Red Fox Road Arden Hills MN 55112
NAME OF EQUIPMENT	Simon iXT – Residential Security System
MODEL NUMBER(S) TESTED	600-1054-95R-iXT
TEST REPORT NUMBER	WC907293
TEST DATE(S)	18 September – 01 October 2009

TÜV SÜD America Inc, as an independent testing laboratory, declares that the equipment tested as specified above conforms to the electromagnetic compatibility requirements of FCC Part 15 Subpart C Sections 15.247 *"Operation within the bands 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz"* and 15.207 *"Conducted limits"* and Industry Canada's RSS-210 Issue 7 *"Low-power Licence-exempt Radiocommunication Devices (All Frequency Bands): Category I Equipment"* and RSS-Gen Issue 2 *"General Requirements and Information for the Certification of Radiocommunication Equipment"*

It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics. Any modifications necessary for compliance made during testing on the above mentioned date(s) must be implemented in all production units for compliance to be maintained.

		Tested by:	Approved by:
Date:	19 October 2009		
Location:	Taylors Falls MN USA	Greg Jakubowski Senior EMC Technician	Joel T Schneider Senior EMC Engineer

Not Transferable

EMC TEST REPORT

Test Report No.	**WC907293**	Date of issue:	19 October 2009
Model / Serial No(s) Tested	600-1054-95R-iXT / Rev. A		
Product Type	Simon iXT – Residential Security System		
Manufacturer	GE Security Incorporated		
Address	1275 Red Fox Road		
	Arden Hills MN 55112		
Test Result	■ **Positive**	☐ **Negative**	
Total pages including Appendices	**57**		

TÜV SÜD America Inc reports apply only to the specific samples tested under stated test conditions. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. TÜV SÜD America Inc shall have no liability for any deductions, inferences or generalizations drawn by the client or others from TÜV SÜD America Inc issued reports.

This report is the confidential property of the client. As a mutual protection to our clients, the public and ourselves, extracts from the test report shall not be reproduced except in full without our written approval. This report shall not be used by the client to claim product endorsement by NVLAP, NIST, or any agency of the US government.

TÜV SÜD America Inc and its professional staff hold government and Professional organization certifications and are members of AAMI, ACIL, AEA, ANSI, IEEE, NARTE, and VCCI.

REVISION RECORD

REVISION	TOTAL NUMBER OF PAGES	DATE	DESCRIPTION
	57	19 October 2009	Initial Release

TEST REPORT CONTENTS **Page(s)**

STATEMENT OF MEASUREMENT UNCERTAINTY

The data and results referenced in this document are accurate. The reader is cautioned that there is some measurement variability due to the tolerances of the test equipment that can contribute to a nominal product measurement uncertainty. Furthermore, component differences and manufacturing process variability of production units similar to that tested may result in additional product uncertainty. If necessary, refer to the test lab for the actual measurement uncertainty for specific tests.

TEST EQUIPMENT

All measurement instrumentation is traceable to the National Institute of Standards and Technology and is calibrated according to internal procedure.

EMC TEST REGULATIONS:
The tests were performed according to the following regulations:

- FCC Part 15 Subpart C Section 15.247
- FCC Part 15 Subpart C Section 15.207
- Industry Canada RSS-210 Issue 7
- Industry Canada RSS-Gen Issue 2

ENVIRONMENTAL CONDITIONS IN THE LAB

	Actual
Temperature:	: 22-25 °C
Relative Humidity	: 32-41 %
Atmospheric pressure	: 98-99 kPa

POWER SUPPLY UTILIZED

Power supply system : 110-120 V / 60 Hz / 1ϕ

SIGN EXPLANATIONS

☐ - not applicable
■ - applicable

6 dB Bandwidth
FCC 15.247(a)(2), IC RSS-210 A8.2(a)

Test summary
The requirements are: ■ - MET ☐ - NOT MET
Test was performed in accordance with the test procedure of FCC KDB Publication 558074
The minimum 6 dB bandwidth for 11 Mb/s = 9.92 MHz
The minimum 6 dB bandwidth for 54 Mb/s = 16.44 MHz

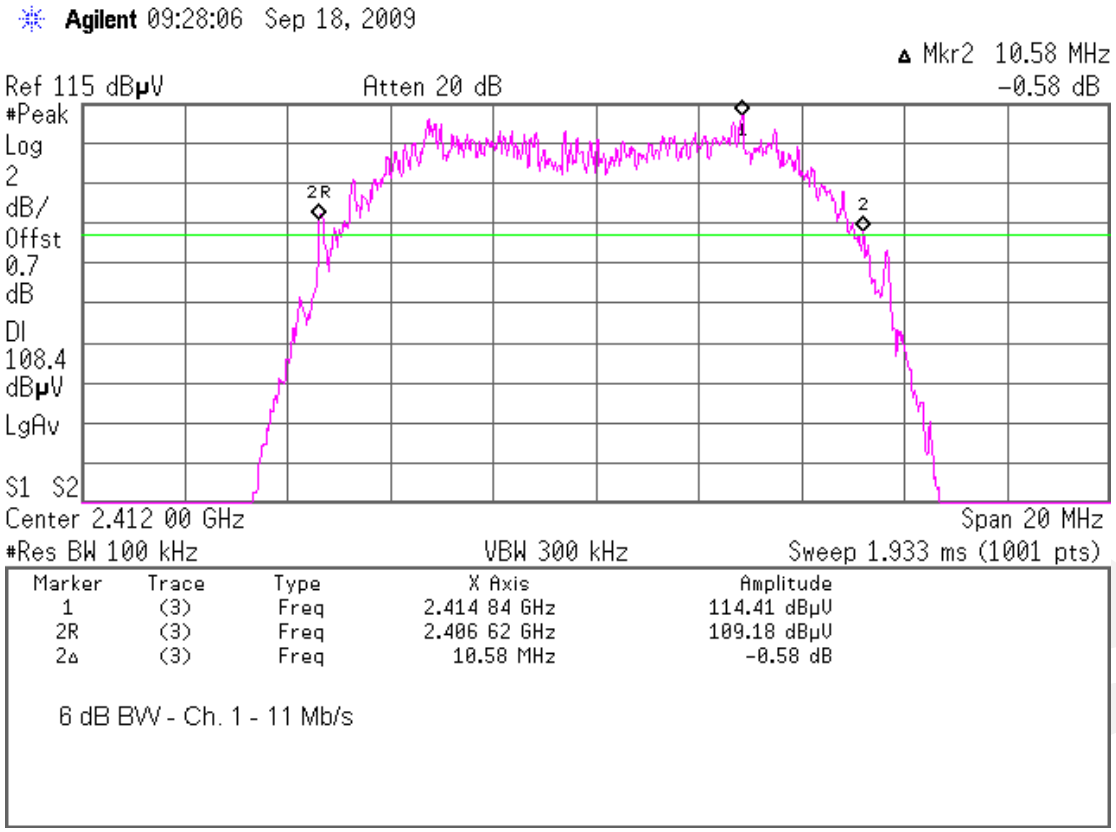
Test location
☐ - Wild River Lab Large Test Site (Open Area Test Site)
☐ - Wild River Lab Small Test Site (Open Area Test Site)
■ - Wild River Lab Tech Area, conducted measurement

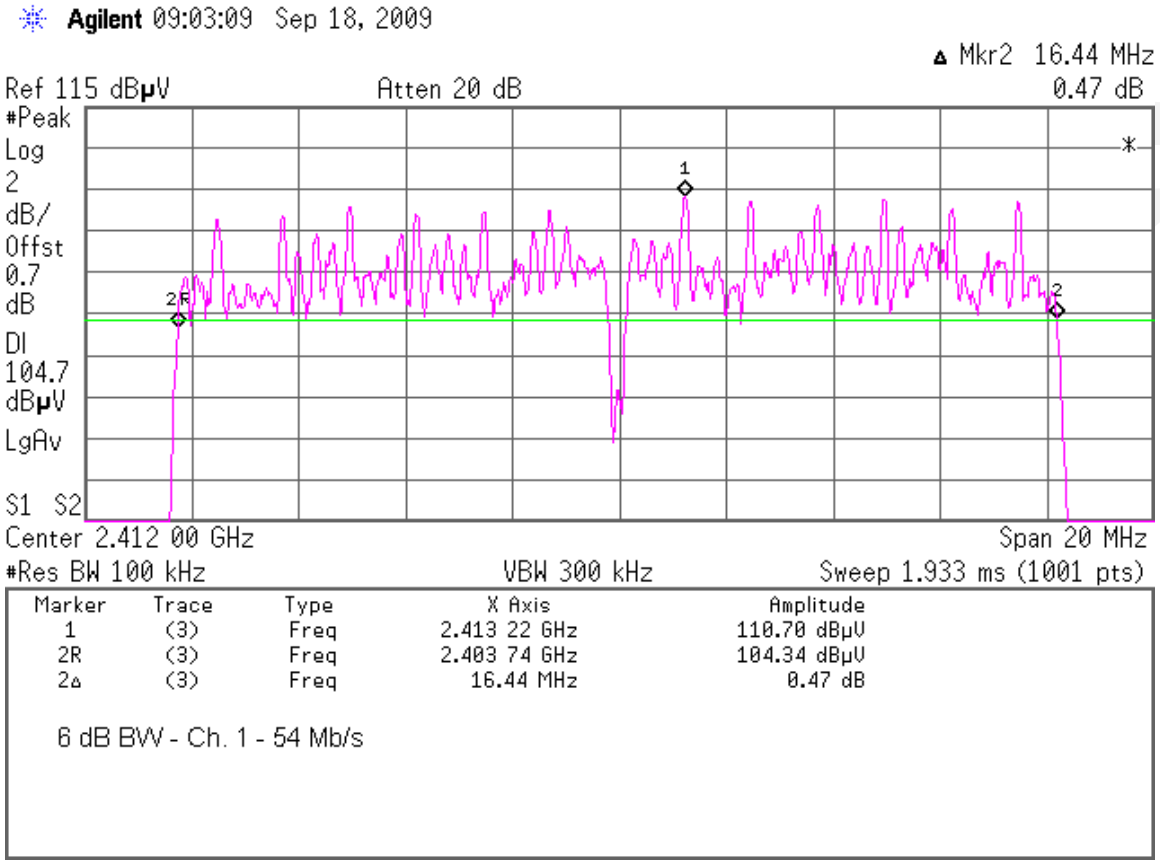
Test equipment

TUV ID	Model	Manufacturer	Description	Serial	Cal Due
WRLE03371	E4440A	Agilent	Spectrum Analyzer	MY43362222	11-Aug-10

Test limit
500 kHz minimum

Test data
See following pages


Agilent 09:28:06 Sep 18, 2009
Mkr2 10.58 MHz
-0.58 dB
Ref 115 dBµV
Atten 20 dB
#Peak
Log
2
dB/
Offst
0.7
dB
Dl
108.4
dBµV
LgAv
S1 S2
Center 2.412 00 GHz
Span 20 MHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 1.933 ms (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.414 84 GHz 114.41 dBµV
2R (3) Freq 2.406 62 GHz 109.18 dBµV
2Δ (3) Freq 10.58 MHz -0.58 dB
6 dB BW - Ch. 1 - 11 Mb/s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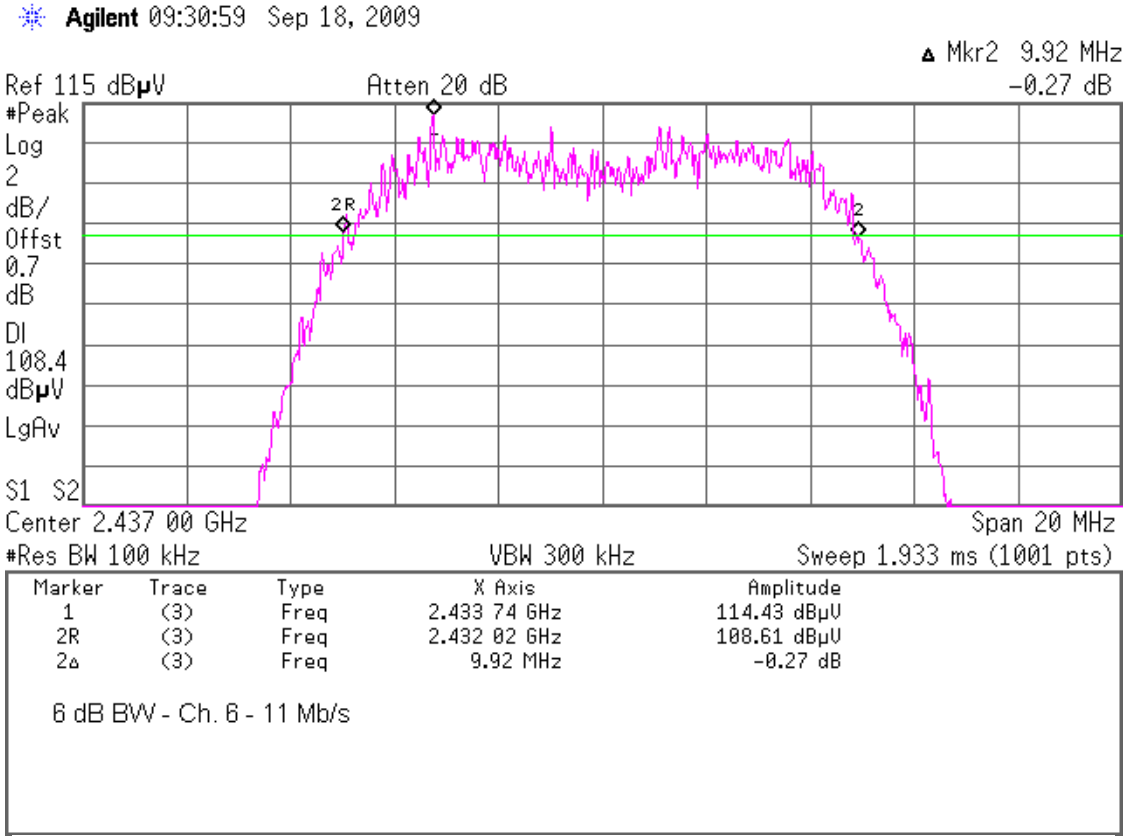
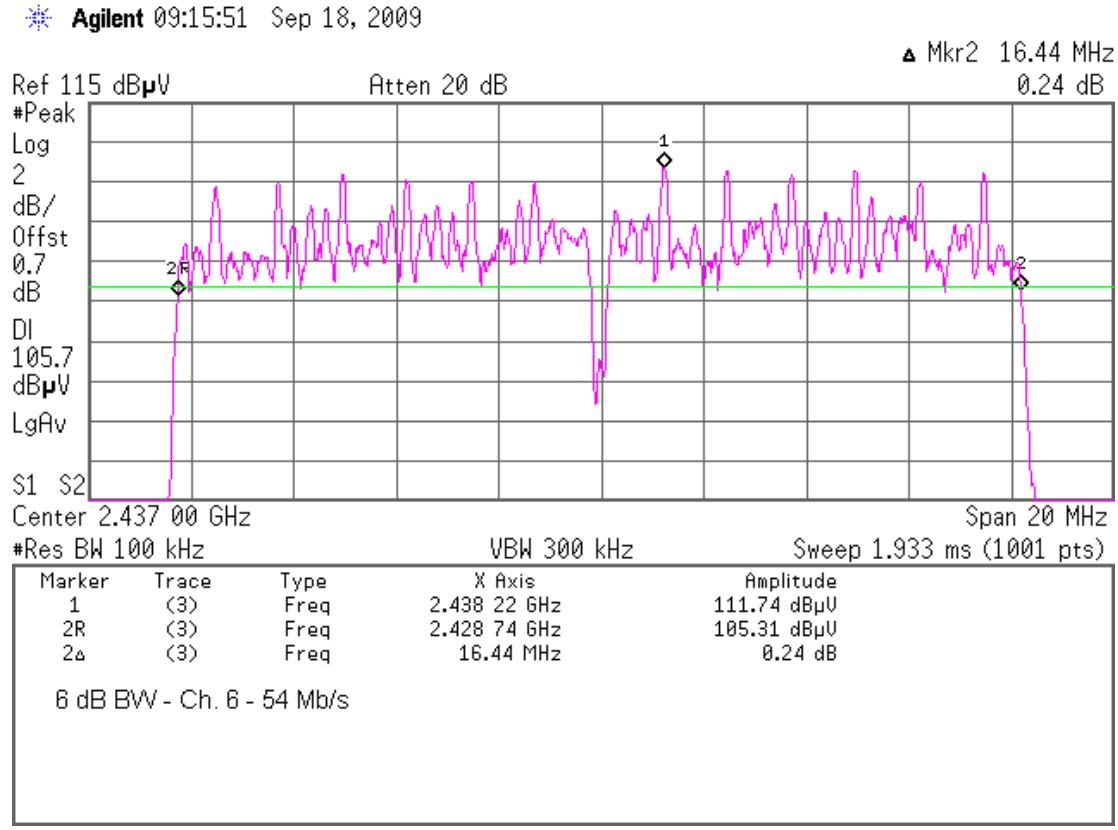
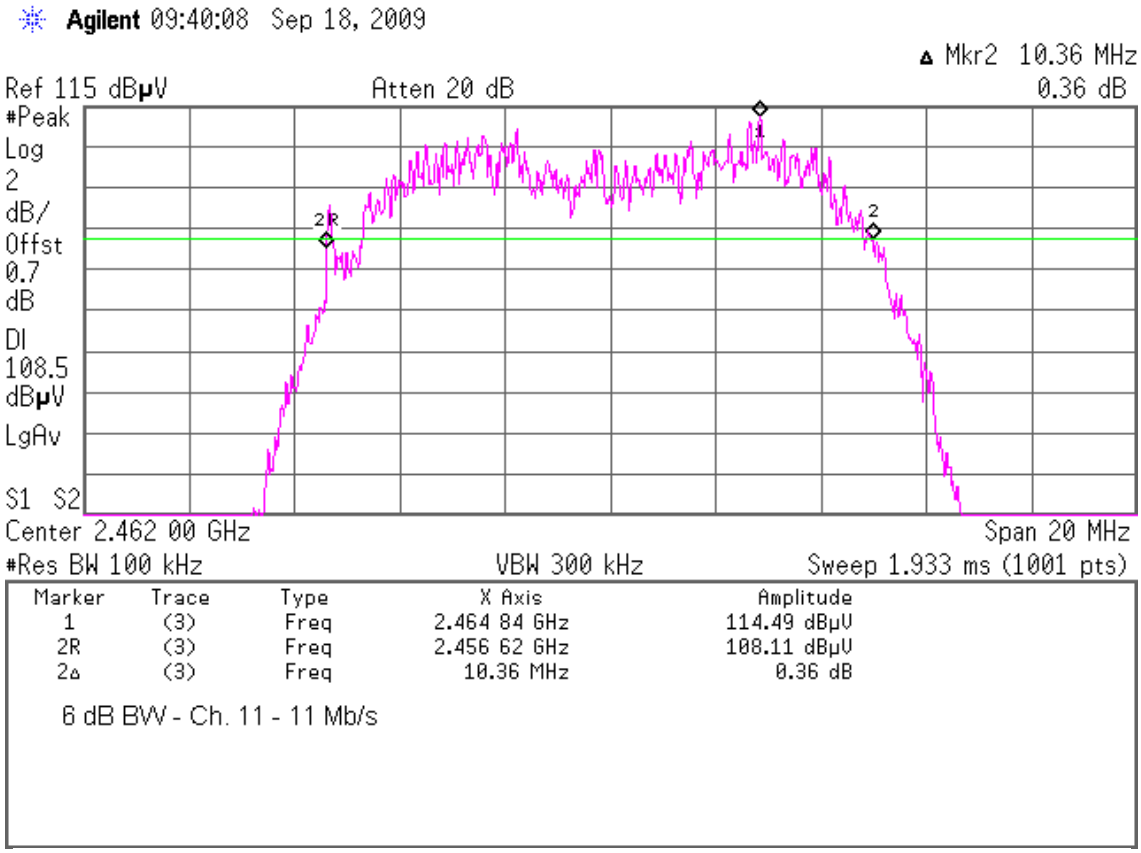
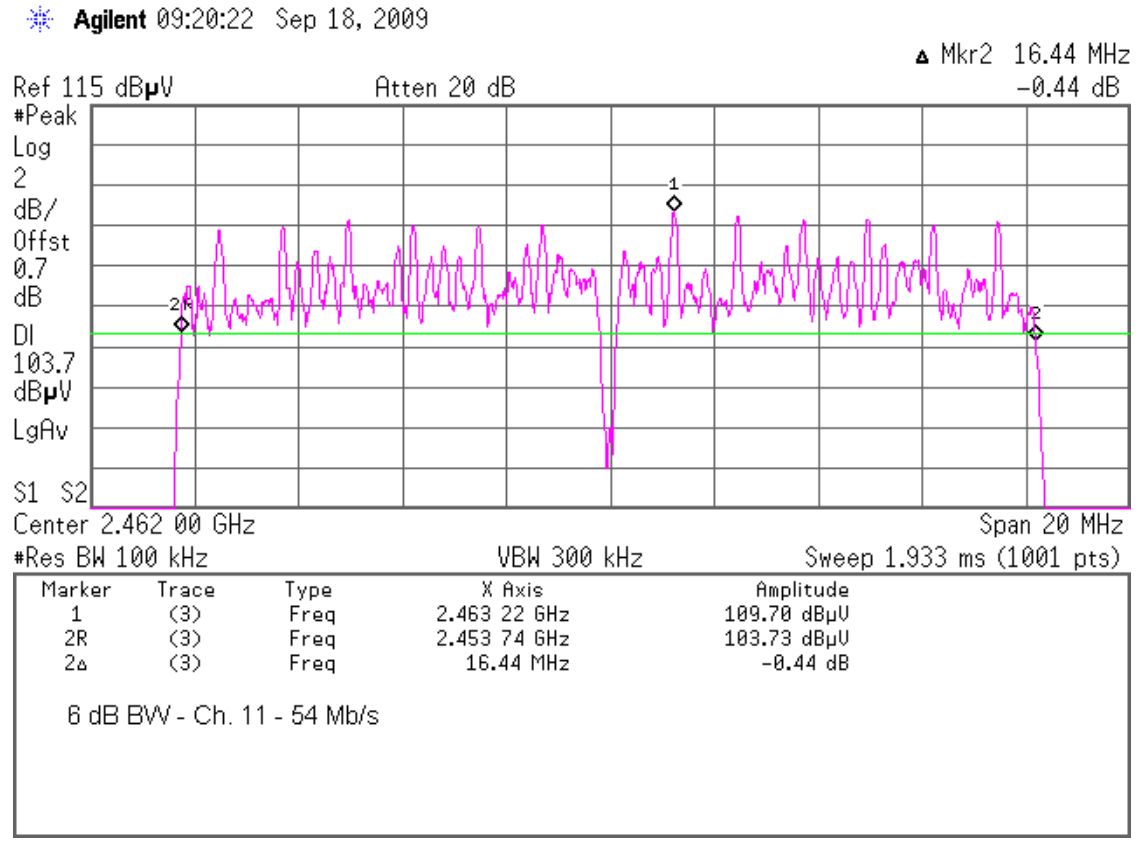
Mkr2 16.44 MHz
0.47 dB
Ref 115 dBµV
Atten 20 dB
#Peak
Log
2
dB/
Offst
0.7
dB
Dl
104.7
dBµV
LgAv
S1 S2
Center 2.412 00 GHz
Span 20 MHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 1.933 ms (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.413 22 GHz 110.70 dBµV
2R (3) Freq 2.403 74 GHz 104.34 dBµV
2Δ (3) Freq 16.44 MHz 0.47 dB
6 dB BW - Ch. 1 - 54 Mb/s


Agilent 09:30:59 Sep 18, 2009
Mkr2 9.92 MHz
-0.27 dB
Ref 115 dBµV
Atten 20 dB
#Peak
Log
2
dB/
Offst
0.7
dB
Dl
108.4
dBµV
LgAv
S1 S2
2R
2
Center 2.437 00 GHz
Span 20 MHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 1.933 ms (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.433 74 GHz 114.43 dBµV
2R (3) Freq 2.432 02 GHz 108.61 dBµV
2Δ (3) Freq 9.92 MHz -0.27 dB
6 dB BW - Ch. 6 - 11 Mb/s


Agilent 09:15:51 Sep 18, 2009
Mkr2 16.44 MHz
0.24 dB
Ref 115 dBµV
Atten 20 dB
#Peak
Log
2
dB/
Offst
0.7
dB
Dl
105.7
dBµV
LgAv
S1 S2
1
2R
2
Center 2.437 00 GHz
Span 20 MHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 1.933 ms (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.438 22 GHz 111.74 dBµV
2R (3) Freq 2.428 74 GHz 105.31 dBµV
2Δ (3) Freq 16.44 MHz 0.24 dB
6 dB BW - Ch. 6 - 54 Mb/s


Agilent 09:40:08 Sep 18, 2009
Mkr2 10.36 MHz
0.36 dB
Ref 115 dBµV
Atten 20 dB
#Peak
Log
2
dB/
Offst
0.7
dB
Dl
108.5
dBµV
LgAv
S1 S2
Center 2.462 00 GHz
Span 20 MHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 1.933 ms (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.464 84 GHz 114.49 dBµV
2R (3) Freq 2.456 62 GHz 108.11 dBµV
2Δ (3) Freq 10.36 MHz 0.36 dB
6 dB BW - Ch. 11 - 11 Mb/s


Agilent 09:20:22 Sep 18, 2009
Mkr2 16.44 MHz
-0.44 dB
Ref 115 dBµV
Atten 20 dB
#Peak
Log
2
dB/
Offst
0.7
dB
Dl
103.7
dBµV
LgAv
S1 S2
Center 2.462 00 GHz
Span 20 MHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 1.933 ms (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.463 22 GHz 109.70 dBµV
2R (3) Freq 2.453 74 GHz 103.73 dBµV
2Δ (3) Freq 16.44 MHz -0.44 dB
6 dB BW - Ch. 11 - 54 Mb/s

Maximum peak output power
FCC 15.247(b)(3), IC RSS-210 A8.4(4)

Test summary
The requirements are: ■ - MET ☐ - NOT MET
Test was performed in accordance with the test procedure of FCC KDB Publication 558074
Maximum peak output power for 11 Mb/s is 15.2 dBm or 33.1 mW
Maximum peak output power for 54 Mb/s is 10.8 dBm or 12 mW

Test location
☐ - Wild River Lab Large Test Site (Open Area Test Site)
☐ - Wild River Lab Small Test Site (Open Area Test Site)
■ - Wild River Lab Tech Area, conducted measurement

Test equipment

TUV ID	Model	Manufacturer	Description	Serial	Cal Due
3334	8542C	Gigatronics	Peak Power Meter	1831096	18-Mar-10
3335	80350A	Gigatronics	Peak Power Probe	1828549	18-Mar-10

Test limit
1 watt

Test data in dBm

	low	mid	high
11Mbps	15.2	14.8	14.9
54Mbps	9.8	10.8	9

Spurious emissions
FCC 15.247(d), IC RSS-210 A8.5

Test summary
The requirements are: ■ - MET ☐ - NOT MET
Test was performed in accordance with ANSI C63.4 2003, clause 8.3 and FCC KDB Publication 558074
Maximum conducted spurious emission for 54 Mb/s is –52 dBc at 1.63 GHz
Maximum conducted spurious emission for 11 Mb/s is –54 dBc at 9.76 GHz
Maximum radiated spurious emission below 1 GHz is 32.47 dBµV/m or 42 µV/m at 3 meters at 73.159 MHz
Maximum radiated spurious emission above 1 GHz is 46.99 dBµV/m or 224 µV/m at 3 meters at 1.2 GHz (peak)
Maximum radiated spurious emission above 1 GHz is 43.02 dBµV/m or 142 µV/m at 3 meters at 1.2 GHz (average)
Minimum margin of compliance = 10 dB

Above 1 GHz, rbw and vbw = 1 MHz for peak readings.
Above 1 GHz, rbw = 1 MHz, vbw = 10 Hz for average readings.

Test location
■ - Wild River Lab Large Test Site (Open Area Test Site)
☐ - Wild River Lab Small Test Site (Open Area Test Site)
■ - Wild River Lab Tech Area, conducted measurement

Test equipment

TUV ID	Model	Manufacturer	Description	Serial	Cal Due
WRLE03204	EM-6917B	Electro-Metrics	Biconicalog Periodic	102	17-Dec-09
WRLE03847	ZHL-1042J	Mini-Circuits	Preamplifier 10 - 3000 MHz	0607	Code B 14-May-10
WRLE02673	85662A	Hewlett-Packard	Analyzer Display	2152A03687	19-Mar-10
WRLE03294	8566B	Hewlett-Packard	Spectrum Analyzer	2349A03098	19-Mar-10
WRLE02680	85650A	Hewlett-Packard	Quasi-Peak Adapter	2043A00343	02-Jun-10
WRLE02075	3115	EMCO	Ridge Guide Ant. 1-18 GHz	9001-3275	13-Jan-10
WRLE10527	SL18B4020	Phase One Microwave	Preamplifier 1 – 18 GHz	0001	Code B 28-Sep-10

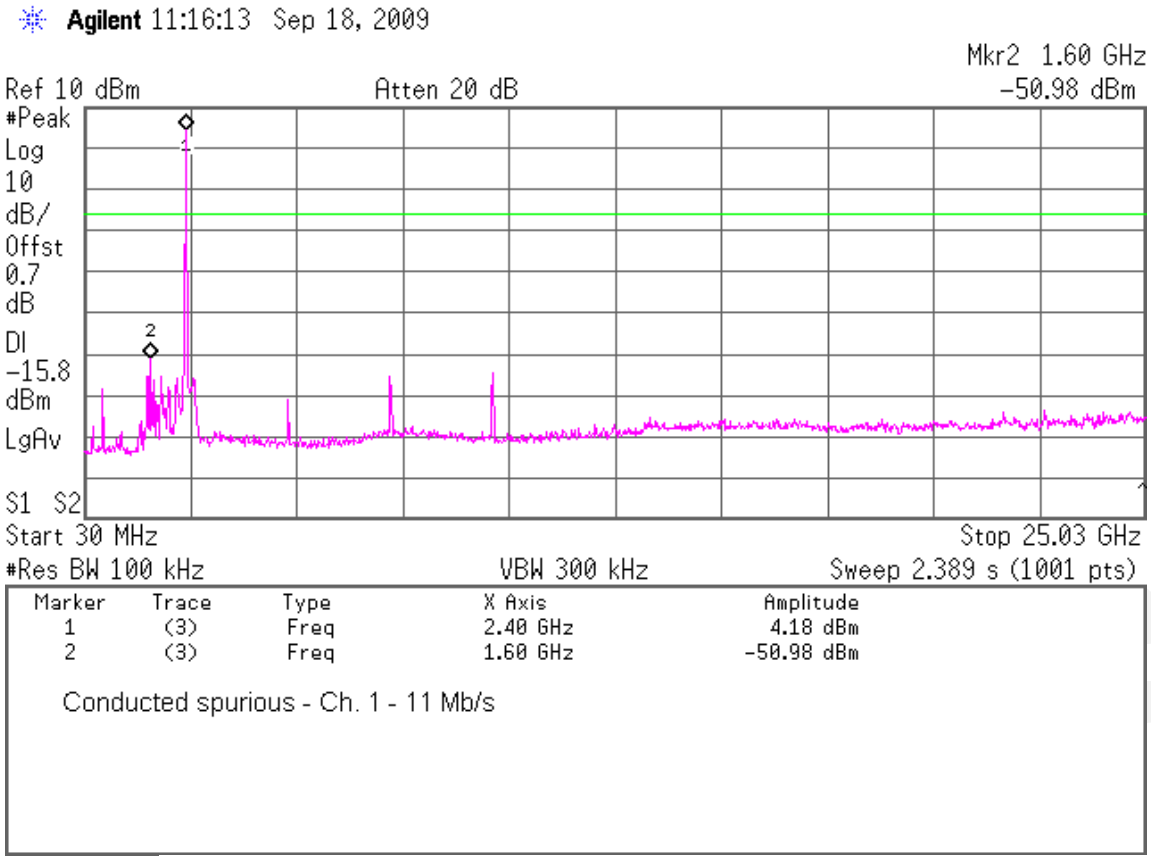
Cal Code B = Calibration verification performed internally.

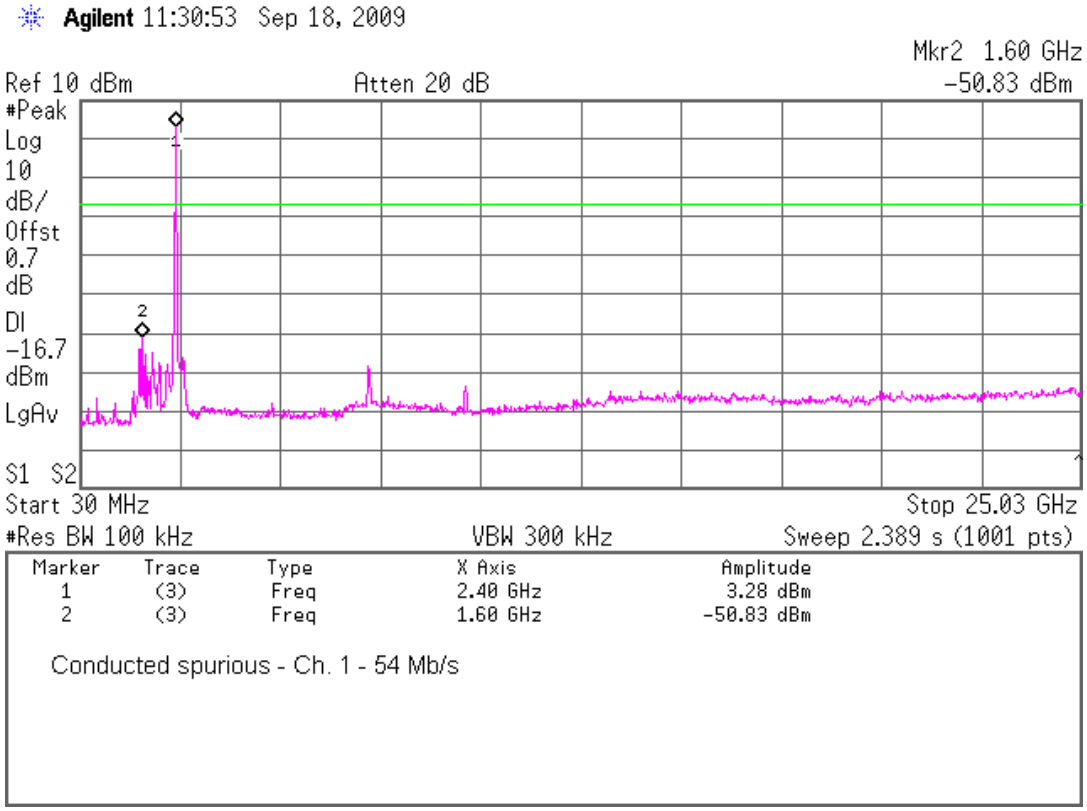
Test limit - conducted
-20 dBc

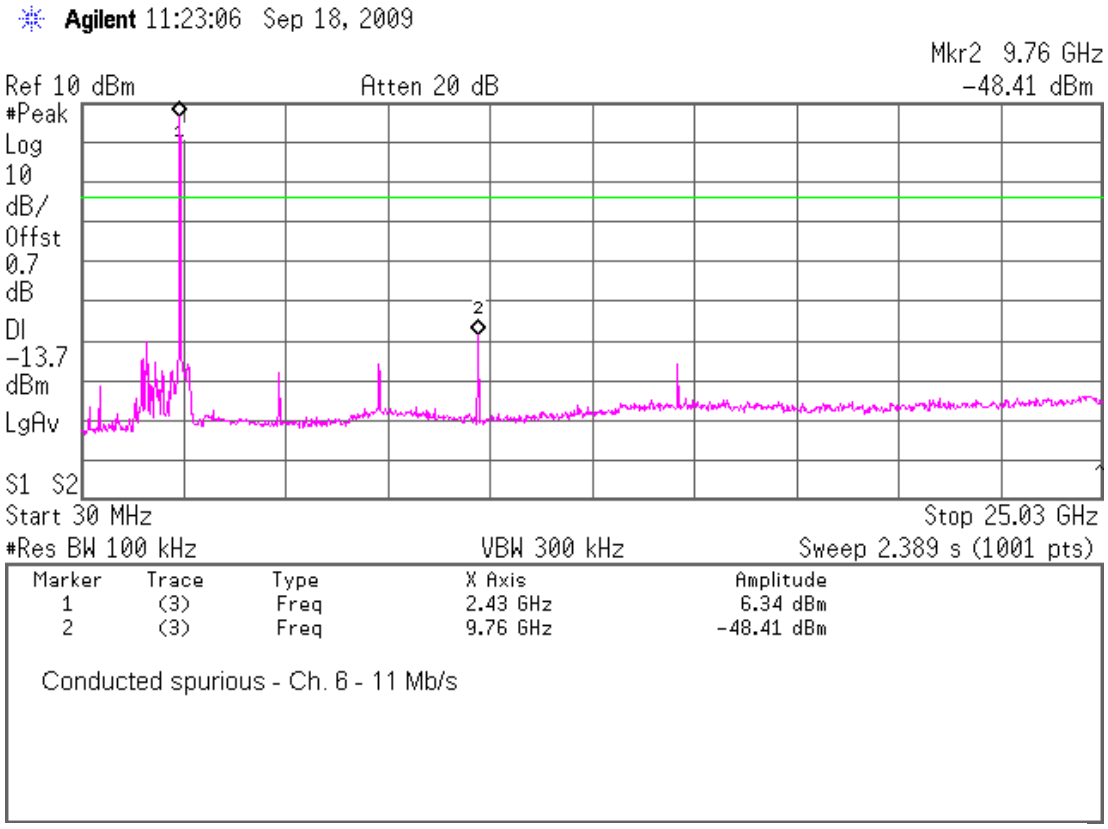
Test limit within restricted bands per 15.205 - radiated

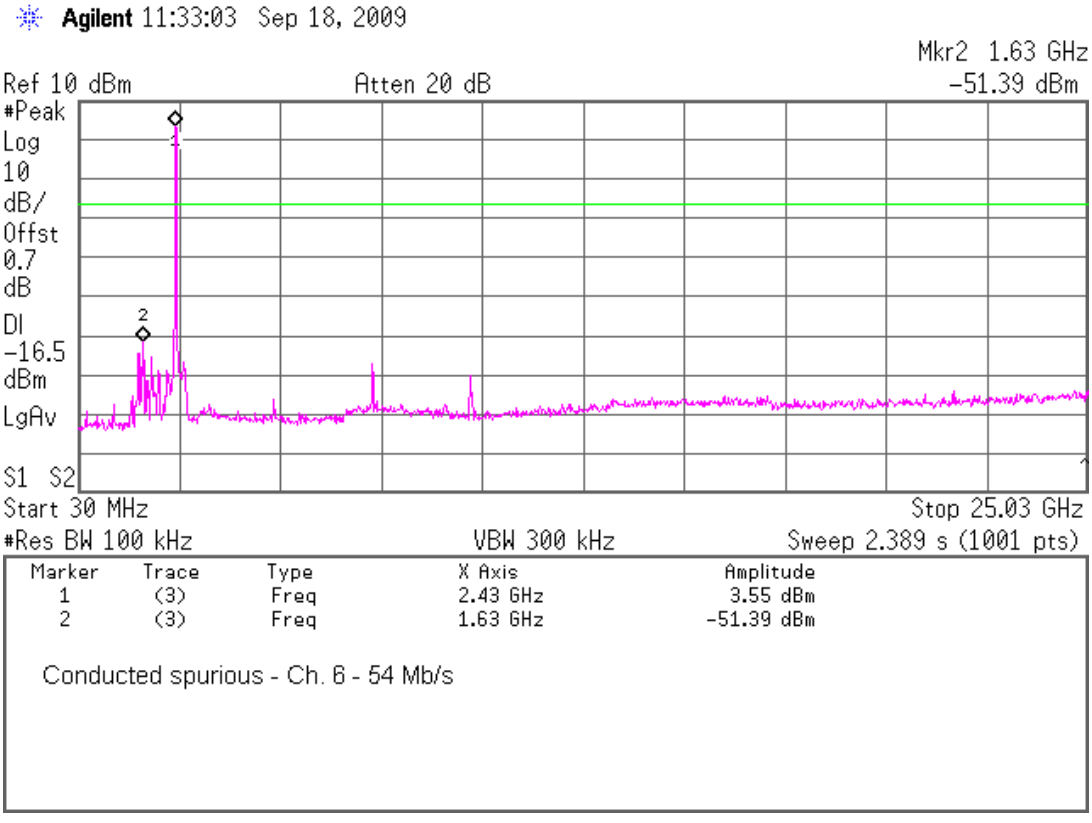
Frequency (MHz)	Field strength (µV/meter)	Field strength (dBµV/meter)
30 - 88	100, QP	40.0
88 - 216	150, QP	43.5
216 - 960	200, QP	46.0
Above 960	500, QP	54.0
> 1000	500, AV 5000, PK	54.0 74.0

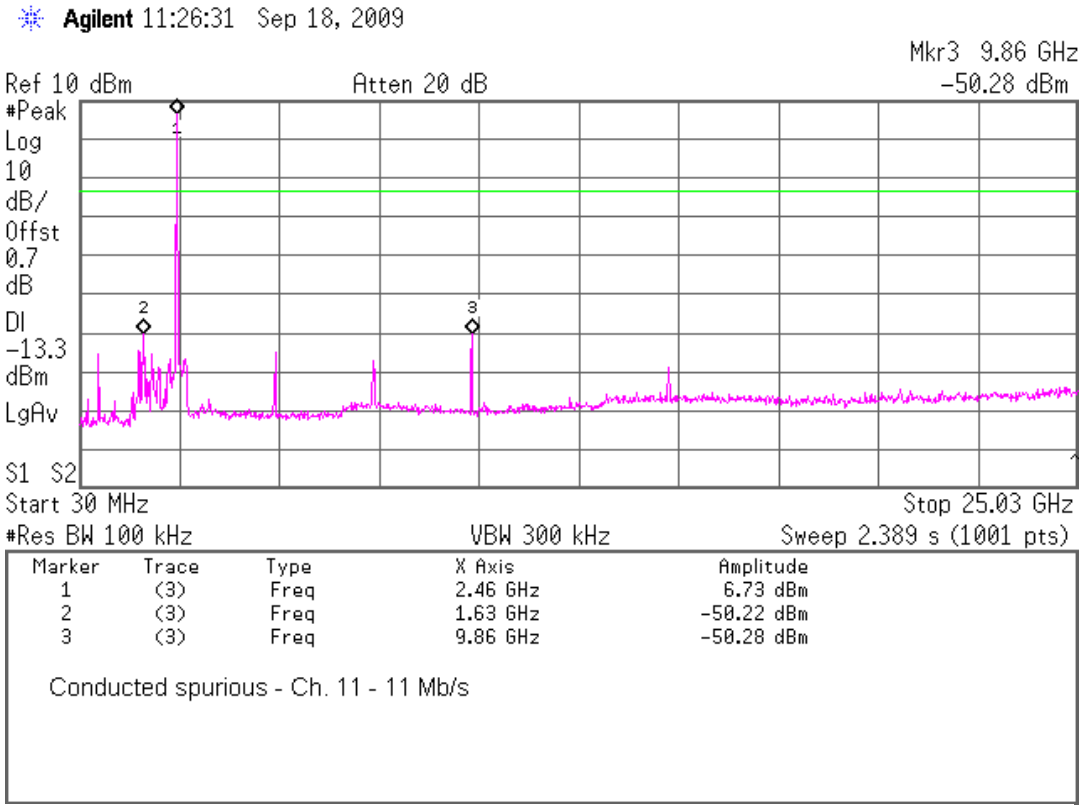
Test data
See following pages

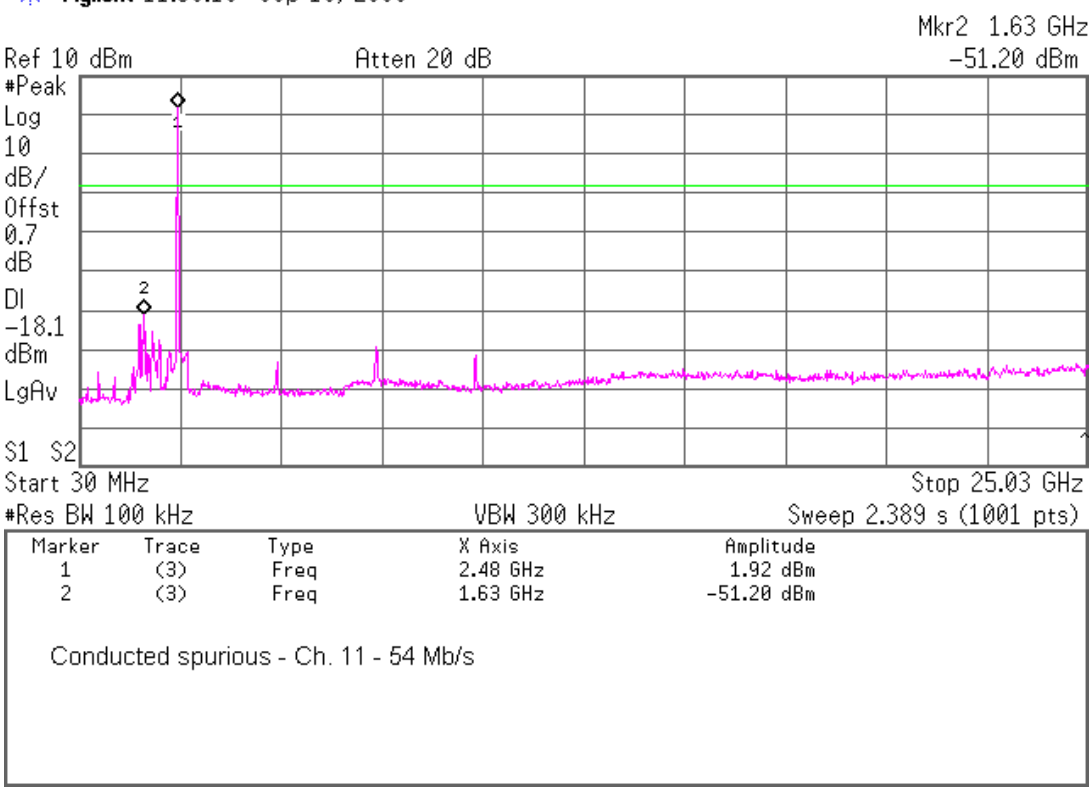

Agilent 11:16:13 Sep 18, 2009
Mkr2 1.60 GHz
-50.98 dBm
Ref 10 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
Dl
-15.8
dBm
LgAv
S1 S2
Start 30 MHz
Stop 25.03 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 2.389 s (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.40 GHz 4.18 dBm
2 (3) Freq 1.60 GHz -50.98 dBm
Conducted spurious - Ch. 1 - 11 Mb/s

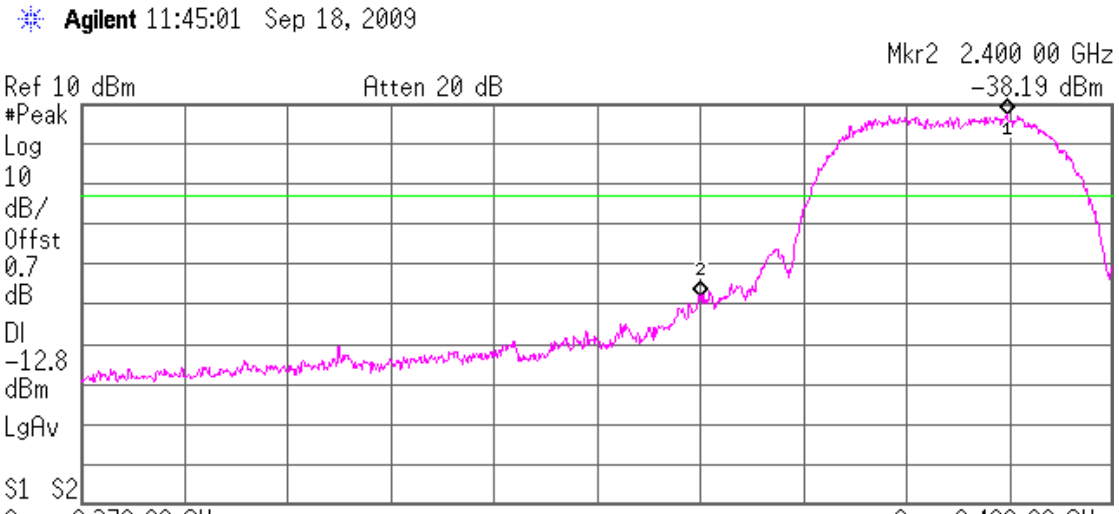

Agilent 11:30:53 Sep 18, 2009
Mkr2 1.60 GHz
-50.83 dBm
Ref 10 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
Dl
-16.7
dBm
LgAv
S1 S2
Start 30 MHz
Stop 25.03 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 2.389 s (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.40 GHz 3.28 dBm
2 (3) Freq 1.60 GHz -50.83 dBm
Conducted spurious - Ch. 1 - 54 Mb/s


Agilent 11:23:06 Sep 18, 2009
Mkr2 9.76 GHz
-48.41 dBm
Ref 10 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
Dl
-13.7
dBm
LgAv
S1 S2
Start 30 MHz
Stop 25.03 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 2.389 s (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.43 GHz 6.34 dBm
2 (3) Freq 9.76 GHz -48.41 dBm
Conducted spurious - Ch. 6 - 11 Mb/s


Agilent 11:33:03 Sep 18, 2009
Mkr2 1.63 GHz
-51.39 dBm
Ref 10 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
Dl
-16.5
dBm
LgAv
S1 S2
Start 30 MHz
Stop 25.03 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 2.389 s (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.43 GHz 3.55 dBm
2 (3) Freq 1.63 GHz -51.39 dBm
Conducted spurious - Ch. 6 - 54 Mb/s


Agilent 11:26:31 Sep 18, 2009
Mkr3 9.86 GHz
-50.28 dBm
Ref 10 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
Dl
-13.3
dBm
LgAv
S1 S2
Start 30 MHz
Stop 25.03 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 2.389 s (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.46 GHz 6.73 dBm
2 (3) Freq 1.63 GHz -50.22 dBm
3 (3) Freq 9.86 GHz -50.28 dBm
Conducted spurious - Ch. 11 - 11 Mb/s


Agilent 11:36:18 Sep 18, 2009
Mkr2 1.63 GHz
-51.20 dBm
Ref 10 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
Dl
-18.1
dBm
LgAv
S1 S2
Start 30 MHz
Stop 25.03 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 2.389 s (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.48 GHz 1.92 dBm
2 (3) Freq 1.63 GHz -51.20 dBm
Conducted spurious - Ch. 11 - 54 Mb/s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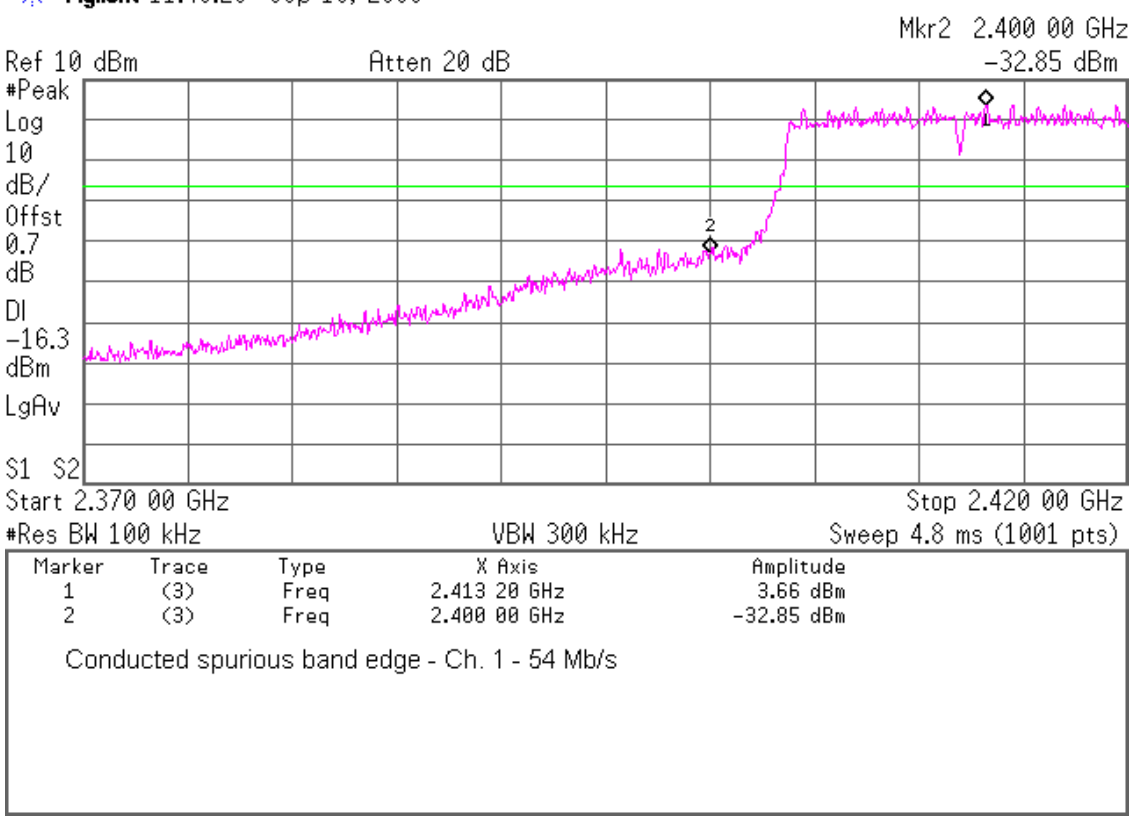
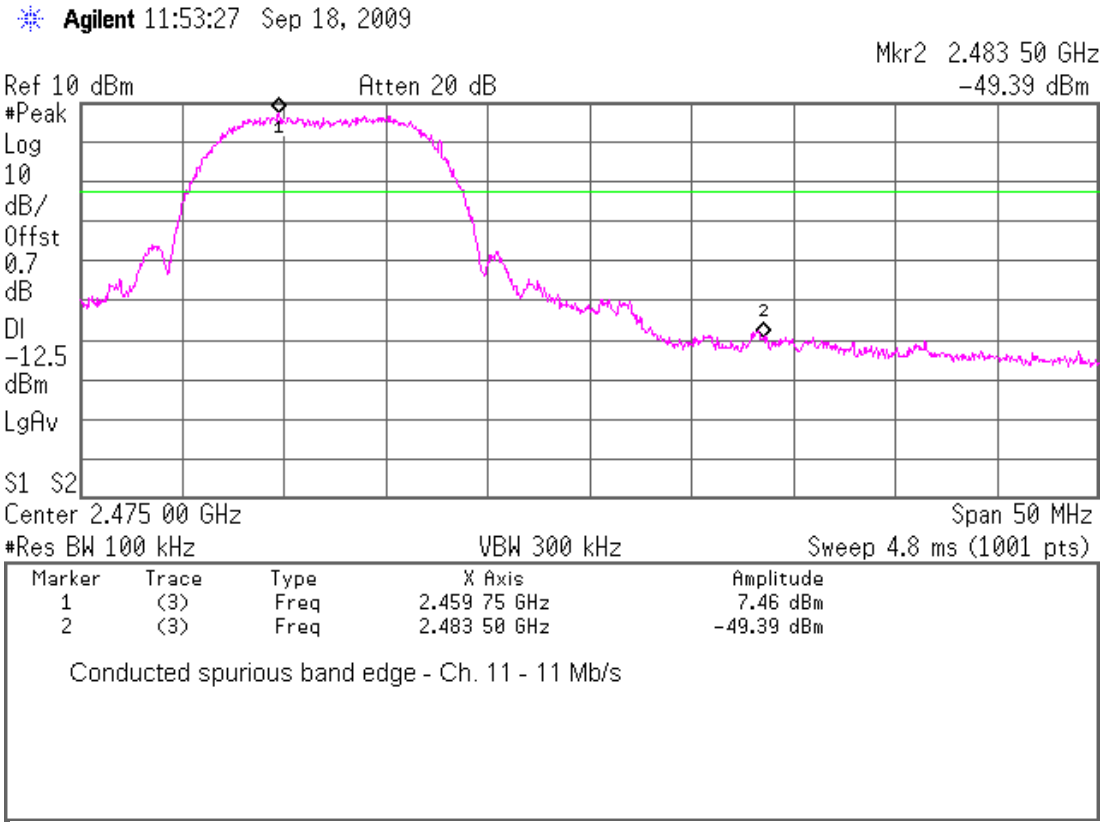
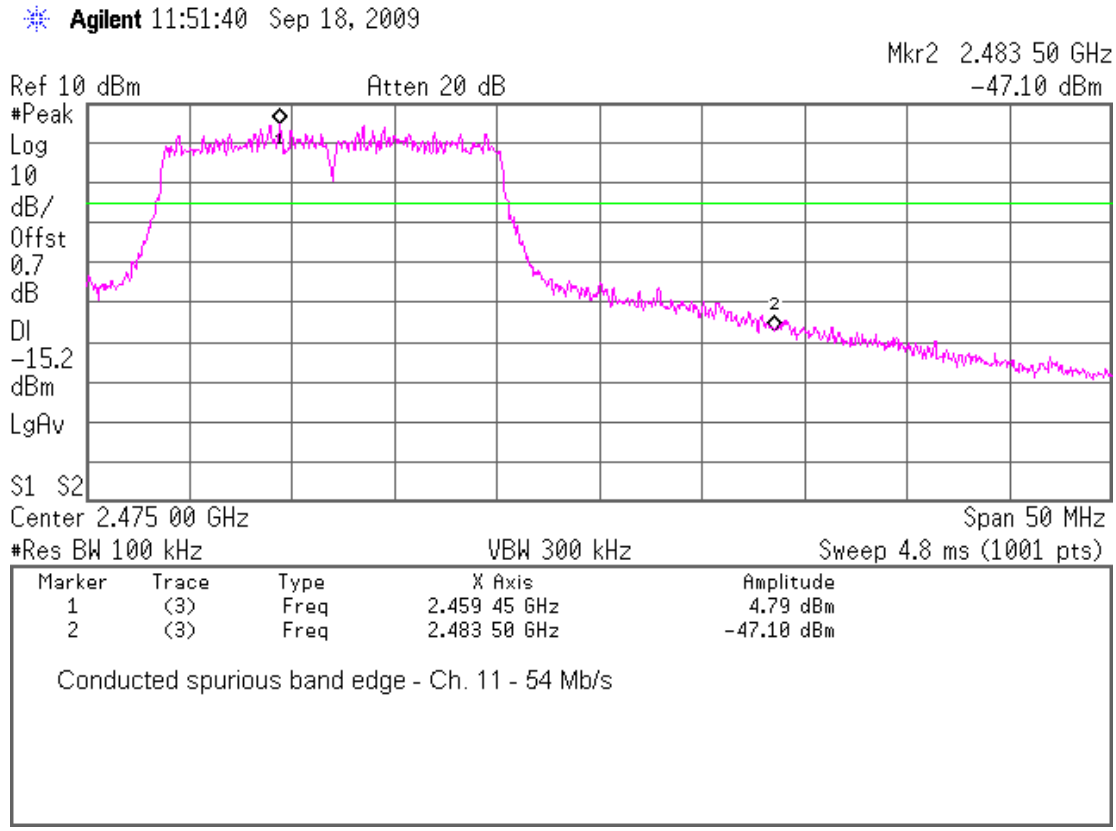
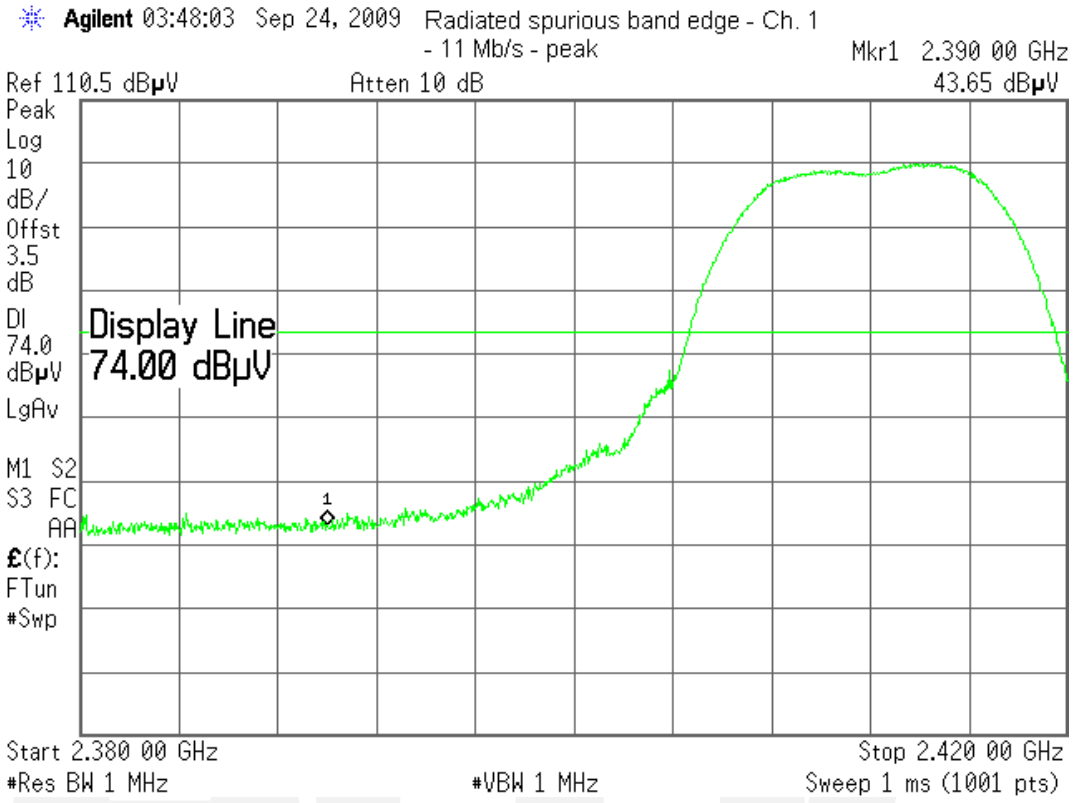
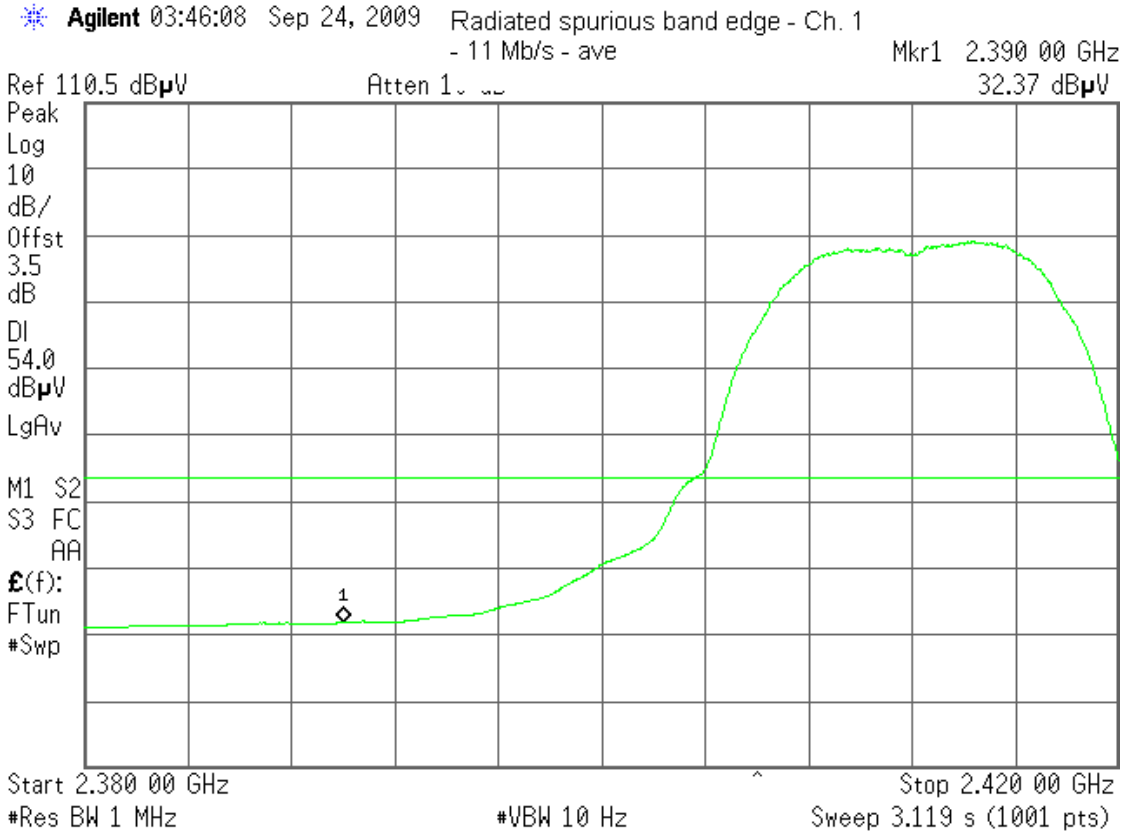
Mkr2 2.400 00 GHz
-38.19 dBm
Ref 10 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
Dl
-12.8
dBm
LgAv
S1 S2
Start 2.370 00 GHz
Stop 2.420 00 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 4.8 ms (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.414 85 GHz 7.20 dBm
2 (3) Freq 2.400 00 GHz -38.19 dBm
Conducted spurious band edge - Ch. 1 - 11 Mb/s

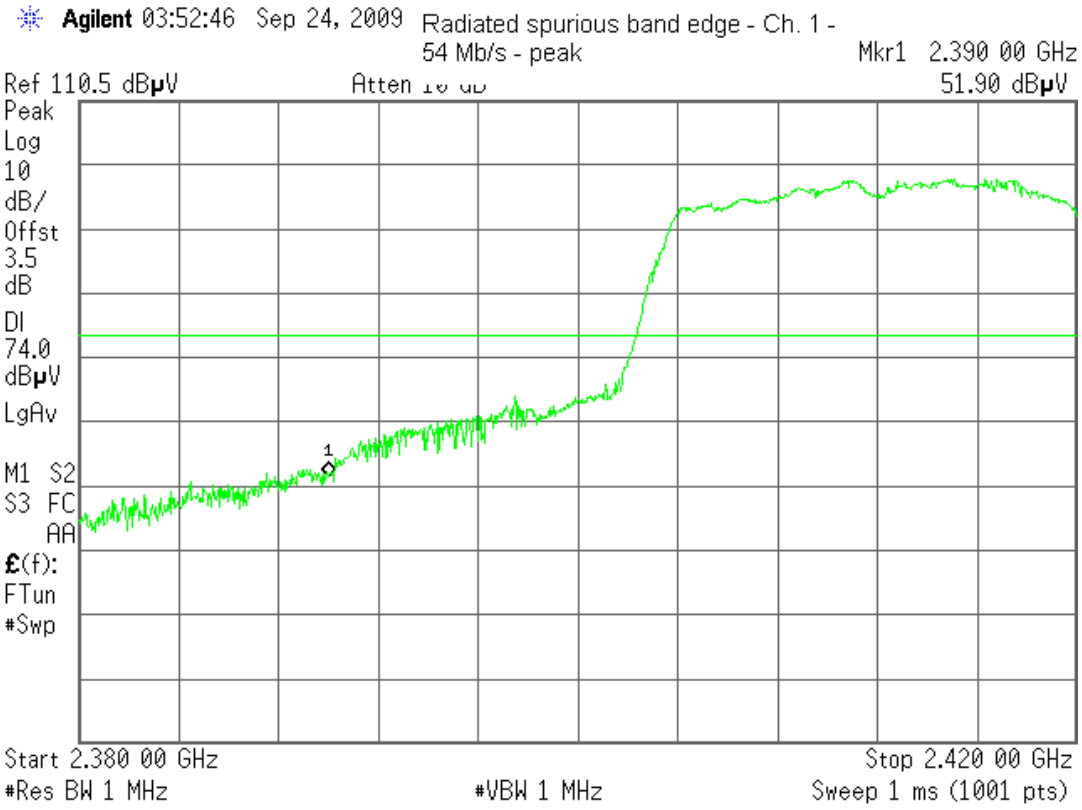

Agilent 11:46:29 Sep 18, 2009
Mkr2 2.400 00 GHz
-32.85 dBm
Ref 10 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
Dl
-16.3
dBm
LgAv
S1 S2
Start 2.370 00 GHz
Stop 2.420 00 GHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 4.8 ms (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.413 20 GHz 3.66 dBm
2 (3) Freq 2.400 00 GHz -32.85 dBm
Conducted spurious band edge - Ch. 1 - 54 Mb/s

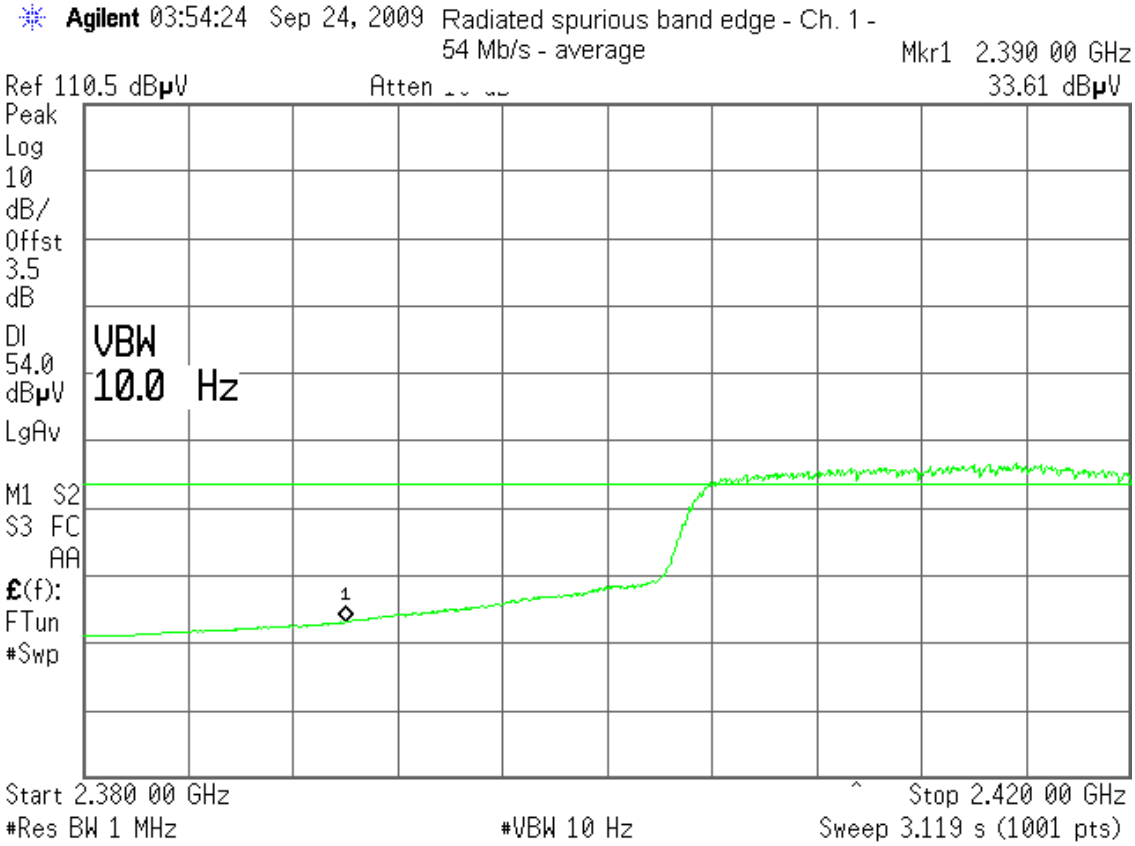

Agilent 11:53:27 Sep 18, 2009
Mkr2 2.483 50 GHz
-49.39 dBm
Ref 10 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
Dl
-12.5
dBm
LgAv
S1 S2
Center 2.475 00 GHz
Span 50 MHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 4.8 ms (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.459 75 GHz 7.46 dBm
2 (3) Freq 2.483 50 GHz -49.39 dBm
Conducted spurious band edge - Ch. 11 - 11 Mb/s

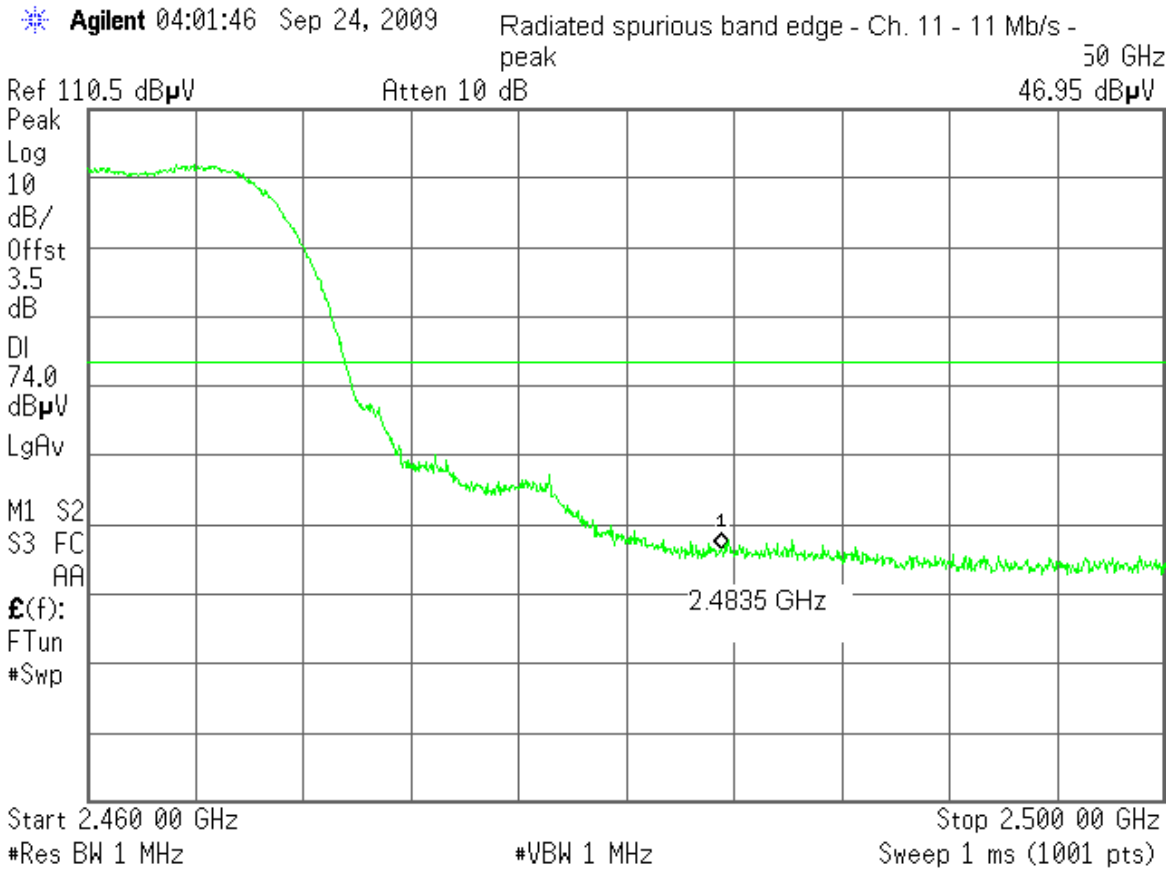

Agilent 11:51:40 Sep 18, 2009
Mkr2 2.483 50 GHz
-47.10 dBm
Ref 10 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
Dl
-15.2
dBm
LgAv
S1 S2
Center 2.475 00 GHz
Span 50 MHz
#Res BW 100 kHz
VBW 300 kHz
Sweep 4.8 ms (1001 pts)
Marker Trace Type X Axis Amplitude
1 (3) Freq 2.459 45 GHz 4.79 dBm
2 (3) Freq 2.483 50 GHz -47.10 dBm
Conducted spurious band edge - Ch. 11 - 54 Mb/s

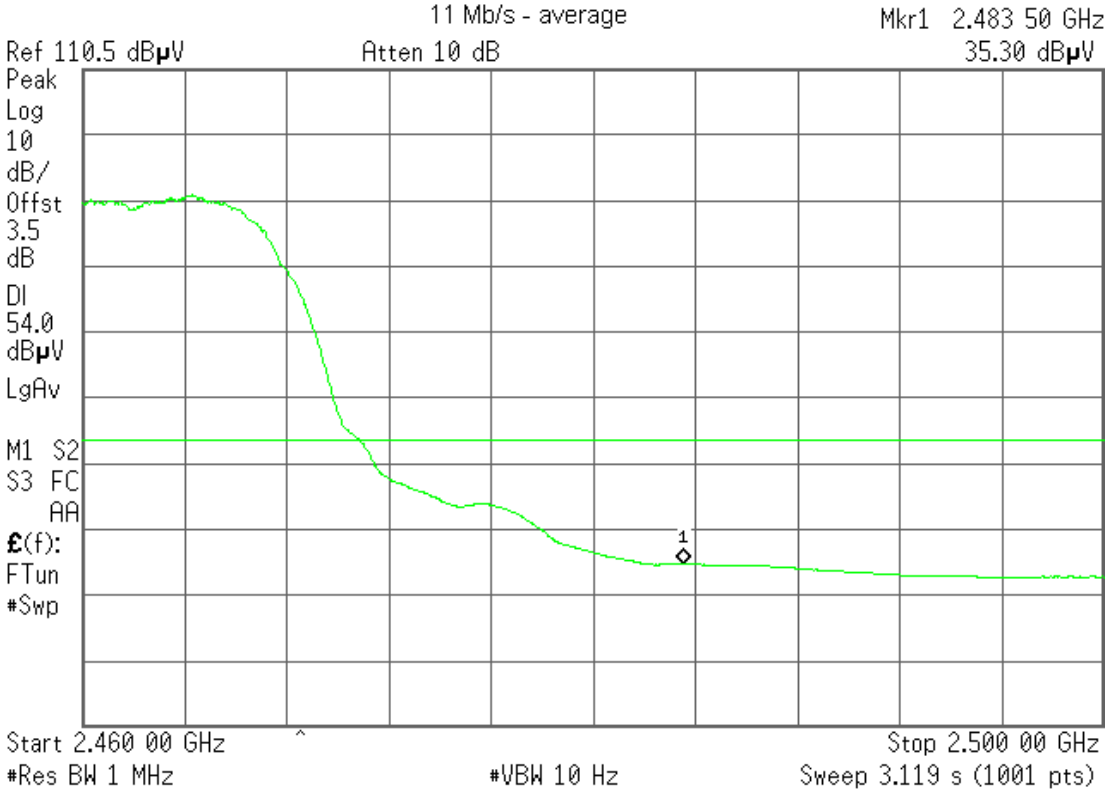

Agilent 03:48:03 Sep 24, 2009
Radiated spurious band edge - Ch. 1
- 11 Mb/s - peak
Mkr1 2.390 00 GHz
Ref 110.5 dBµV
Atten 10 dB
43.65 dBµV
Peak
Log
10
dB/
Offst
3.5
dB
Dl
74.0
dBµV
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
#Swp
Display Line
74.00 dBµV
Start 2.380 00 GHz
#Res BW 1 MHz
#VBW 1 MHz
Stop 2.420 00 GHz
Sweep 1 ms (1001 pts)

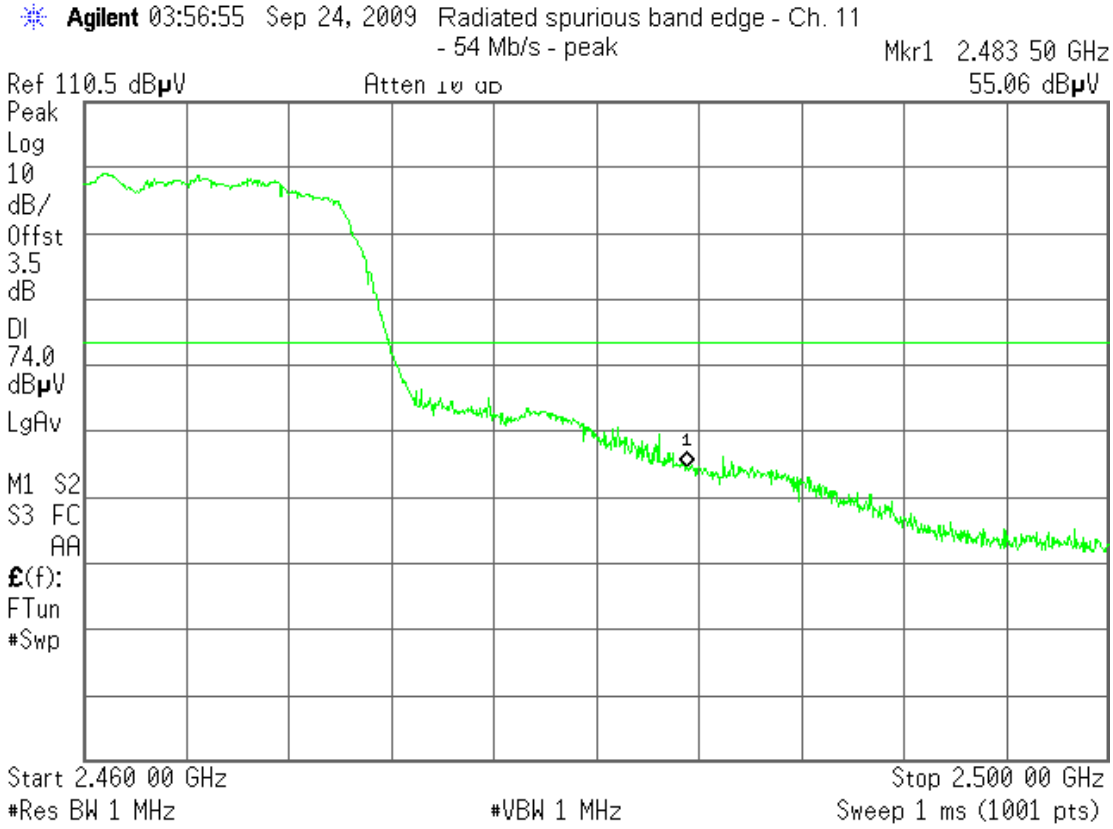

Agilent 03:46:08 Sep 24, 2009
Radiated spurious band edge - Ch. 1
- 11 Mb/s - ave
Mkr1 2.390 00 GHz
Ref 110.5 dBµV
32.37 dBµV
Peak
Log
10
dB/
Offst
3.5
dB
Dl
54.0
dBµV
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
#Swp
Start 2.380 00 GHz
#Res BW 1 MHz
#VBW 10 Hz
Stop 2.420 00 GHz
Sweep 3.119 s (1001 pts)

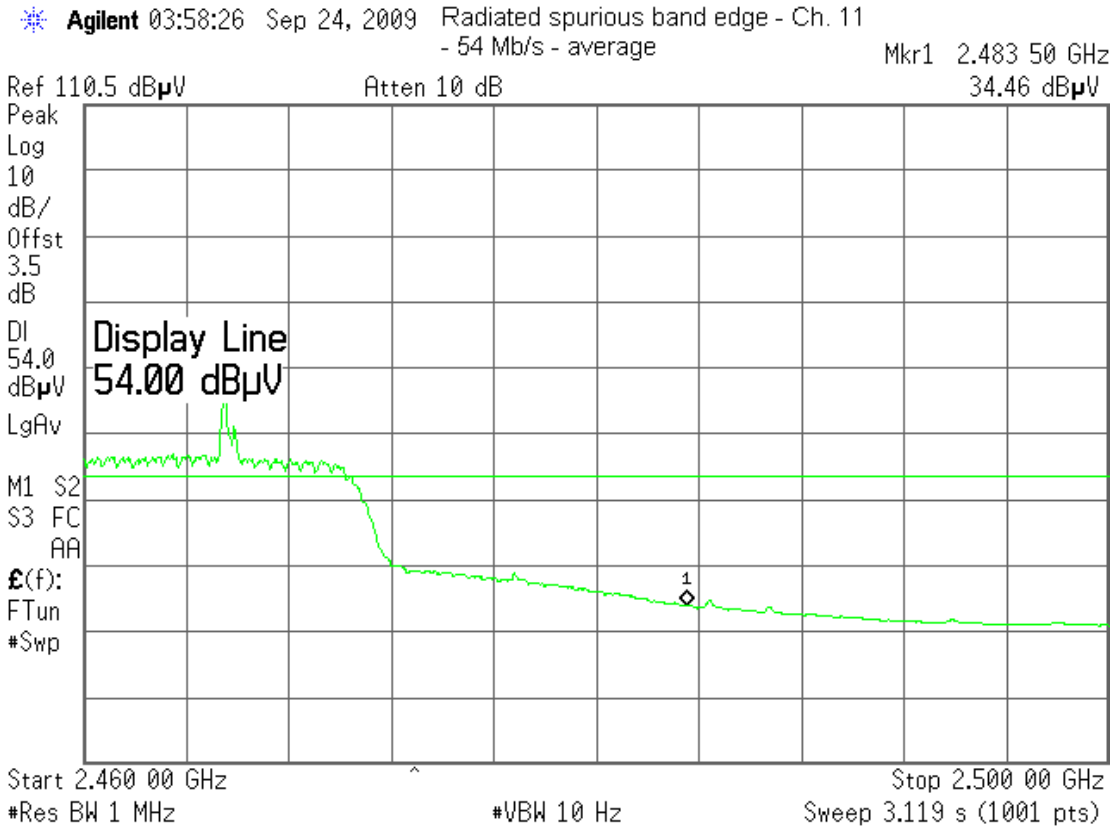

Agilent 03:52:46 Sep 24, 2009
Radiated spurious band edge - Ch. 1 - 54 Mb/s - peak
Mkr1 2.390 00 GHz
51.90 dBµV
Ref 110.5 dBµV
Atten 10 dB
Peak
Log
10
dB/
Offst
3.5
dB
Dl
74.0
dBµV
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
#Swp
Start 2.380 00 GHz
#Res BW 1 MHz
#VBW 1 MHz
Stop 2.420 00 GHz
Sweep 1 ms (1001 pts)


Agilent 03:54:24 Sep 24, 2009
Radiated spurious band edge - Ch. 1 - 54 Mb/s - average
Mkr1 2.390 00 GHz
33.61 dBµV
Ref 110.5 dBµV
Atten 10 dB
Peak
Log
10
dB/
Offst
3.5
dB
Dl
54.0
dBµV
LgAv
VBW
10.0 Hz
M1 S2
S3 FC
AA
£(f):
FTun
#Swp
Start 2.380 00 GHz
#Res BW 1 MHz
#VBW 10 Hz
Stop 2.420 00 GHz
Sweep 3.119 s (1001 pts)


Agilent 04:01:46 Sep 24, 2009
Radiated spurious band edge - Ch. 11 - 11 Mb/s - peak
Ref 110.5 dBµV
Atten 10 dB
46.95 dBµV
Peak
Log
10
dB/
Offst
3.5
dB
Dl
74.0
dBµV
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
#Swp
1
2.4835 GHz
Start 2.460 00 GHz
Stop 2.500 00 GHz
#Res BW 1 MHz
#VBW 1 MHz
Sweep 1 ms (1001 pts)


Agilent 04:02:49 Sep 24, 2009
Radiated spurious band edge - Ch. 11 - 11 Mb/s - average
Mkr1 2.483 50 GHz
Ref 110.5 dBµV
Atten 10 dB
35.30 dBµV
Peak
Log
10
dB/
Offst
3.5
dB
Dl
54.0
dBµV
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
#Swp
1
Start 2.460 00 GHz
Stop 2.500 00 GHz
#Res BW 1 MHz
#VBW 10 Hz
Sweep 3.119 s (1001 pts)


Agilent 03:56:55 Sep 24, 2009 Radiated spurious band edge - Ch. 11
- 54 Mb/s - peak
Mkr1 2.483 50 GHz
Ref 110.5 dBµV
Atten 10 dB
55.06 dBµV
Peak
Log
10
dB/
Offst
3.5
dB
Dl
74.0
dBµV
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
#Swp
Start 2.460 00 GHz
#Res BW 1 MHz
#VBW 1 MHz
Stop 2.500 00 GHz
Sweep 1 ms (1001 pts)


Agilent 03:58:26 Sep 24, 2009 Radiated spurious band edge - Ch. 11
- 54 Mb/s - average
Mkr1 2.483 50 GHz
Ref 110.5 dBµV
Atten 10 dB
34.46 dBµV
Peak
Log
10
dB/
Offst
3.5
dB
Dl
54.0
dBµV
Display Line
54.00 dBµV
LgAv
M1 S2
S3 FC
AA
£(f):
FTun
#Swp
Start 2.460 00 GHz
#Res BW 1 MHz
#VBW 10 Hz
Stop 2.500 00 GHz
Sweep 3.119 s (1001 pts)

RADIATED EMISSIONS

Test Report #:	WC907293 Run 1	Test Area:	LTS		
EUT Model #:	NX-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538, z-wave and wi-fi				
Data File Name:	7293.dat			Page:	1 of 4

List of measurements for run #: 1

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m	DELTA2
802.11\g mid channel						
45.55 MHz	40.37 Qp	0.32 / 15.35 / 29.8 / 0.0	26.24	V / 1.00 / 0	-13.76	n/a
47.8 MHz	41.35 Qp	0.34 / 14.72 / 29.73 / 0.0	26.68	V / 1.00 / 0	-13.32	n/a
73.159 MHz	52.41 Qp	0.54 / 9.2 / 29.69 / 0.0	32.47	V / 1.00 / 0	-7.53	n/a
56.75 MHz	48.0 Qp	0.41 / 12.28 / 29.7 / 0.0	30.99	V / 1.00 / 0	-9.01	n/a
87.45 MHz	52.23 Qp	0.66 / 7.79 / 29.7 / 0.0	30.97	V / 1.00 / 0	-9.03	n/a
75.15 MHz	45.42 Qp	0.56 / 8.93 / 29.7 / 0.0	25.21	V / 1.00 / 0	-14.79	n/a
110.805 MHz	48.51 Qp	0.81 / 9.58 / 29.7 / 0.0	29.2	V / 1.00 / 0	-14.3	n/a
111.55 MHz	46.9 Qp	0.82 / 9.64 / 29.7 / 0.0	27.65	V / 1.00 / 0	-15.85	n/a
143.25 MHz	41.65 Qp	0.9 / 9.74 / 29.75 / 0.0	22.53	V / 1.00 / 0	-20.97	n/a
155.65 MHz	34.83 Qp	0.93 / 9.15 / 29.8 / 0.0	15.11	V / 1.00 / 0	-28.39	n/a
196.0 MHz	31.95 Qp	1.03 / 11.0 / 29.8 / 0.0	14.18	V / 1.00 / 0	-29.32	n/a
204.0 MHz	32.99 Qp	1.06 / 10.96 / 29.8 / 0.0	15.2	V / 1.00 / 0	-28.3	n/a
240.0 MHz	49.0 Qp	1.15 / 11.85 / 29.7 / 0.0	32.3	V / 1.00 / 0	-13.7	n/a
250.0 MHz	47.87 Qp	1.17 / 12.23 / 29.76 / 0.0	31.52	V / 1.00 / 0	-14.48	n/a
300.0 MHz	39.33 Qp	1.25 / 13.25 / 29.9 / 0.0	23.93	V / 1.00 / 0	-22.07	n/a
375.0 MHz	41.81 Qp	1.33 / 15.5 / 30.0 / 0.0	28.64	V / 1.00 / 0	-17.36	n/a
400.45 MHz	32.62 Qp	1.36 / 16.02 / 30.0 / 0.0	20.0	V / 1.00 / 0	-26.0	n/a
480.0 MHz	50.98 Qp	1.45 / 17.05 / 30.2 / 0.0	39.28	V / 1.00 / 0	-6.72	n/a
500.0 MHz	32.5 Qp	1.48 / 17.17 / 30.2 / 0.0	20.94	V / 1.00 / 0	-25.06	n/a
600.0 MHz	43.45 Qp	1.65 / 18.8 / 30.12 / 0.0	33.78	V / 1.00 / 0	-12.22	n/a
625.0 MHz	39.79 Qp	1.7 / 19.7 / 30.18 / 0.0	31.01	V / 1.00 / 0	-14.99	n/a
720.0 MHz	31.65 Qp	1.87 / 20.63 / 30.12 / 0.0	24.03	V / 1.00 / 0	-21.97	n/a
900.0 MHz	39.73 Qp	2.54 / 22.4 / 29.61 / 0.0	35.06	V / 1.00 / 0	-10.94	n/a
1.0 GHz	33.05 Qp	3.01 / 23.25 / 29.76 / 0.0	29.56	V / 1.00 / 0	-24.44	n/a
45.55 MHz	40.91 Qp	0.32 / 15.35 / 29.8 / 0.0	26.78	V / 1.00 / 90	-13.22	n/a
56.75 MHz	48.3 Qp	0.41 / 12.28 / 29.7 / 0.0	31.29	V / 1.00 / 90	-8.71	n/a
56.75 MHz	48.86 Qp	0.41 / 12.28 / 29.7 / 0.0	31.85	V / 1.00 / 180	-8.15	n/a

Tested by: Joel T Schneider (Printed) — Joel T. Schneider (Signature)

Reviewed by: Greg S Jakubowski (Printed) — G Jakubowski (Signature)

RADIATED EMISSIONS

Test Report #:	WC907293 Run 1	Test Area:	LTS		
EUT Model #:	NX-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538, z-wave and wi-fi				
Data File Name:	7293.dat			Page:	2 of 4

List of measurements for run #: 1

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m	DELTA2
111.55 MHz	48.98 Qp	0.82 / 9.64 / 29.7 / 0.0	29.73	V / 1.00 / 180	-13.77	n/a
155.65 MHz	38.0 Qp	0.93 / 9.15 / 29.8 / 0.0	18.28	V / 1.00 / 180	-25.22	n/a
196.0 MHz	33.46 Qp	1.03 / 11.0 / 29.8 / 0.0	15.69	V / 1.00 / 180	-27.81	n/a
204.0 MHz	35.08 Qp	1.06 / 10.96 / 29.8 / 0.0	17.29	V / 1.00 / 180	-26.21	n/a
240.0 MHz	50.86 Qp	1.15 / 11.85 / 29.7 / 0.0	34.16	V / 1.00 / 180	-11.84	n/a
500.0 MHz	35.24 Qp	1.48 / 17.17 / 30.2 / 0.0	23.68	V / 1.00 / 180	-22.32	n/a
720.0 MHz	38.14 Qp	1.87 / 20.63 / 30.12 / 0.0	30.52	V / 1.00 / 180	-15.48	n/a
1.0 GHz	35.5 Qp	3.01 / 23.25 / 29.76 / 0.0	32.01	V / 1.00 / 180	-21.99	n/a
720.0 MHz	40.72 Qp	1.87 / 20.63 / 30.12 / 0.0	33.1	V / 1.00 / 270	-12.9	n/a
480.0 MHz	51.79 Qp	1.45 / 17.05 / 30.2 / 0.0	40.09	V / 1.10 / 10	-5.91	n/a
250.0 MHz	49.58 Qp	1.17 / 12.23 / 29.76 / 0.0	33.23	H / 1.00 / 180	-12.77	n/a
250.0 MHz	50.51 Qp	1.17 / 12.23 / 29.76 / 0.0	34.16	H / 1.20 / 200	-11.84	n/a
802.11\a mid channel						
802.11\a low channel						
802.11\a high channel						
802.11\g high channel						
802.11\g low channel						
no higher levels						
spurious emissions with z-wave						
43.8 MHz	47.52 Qp	0.31 / 15.93 / 29.8 / 0.0	33.96	V / 1.00 / 0	-6.04	n/a

Tested by: Joel T Schneider (Printed) Joel T. Schneider (Signature)

Reviewed by: Greg S Jakubowski (Printed) G Jakubowski (Signature)

RADIATED EMISSIONS

Test Report #:	WC907293 Run 1	Test Area:	LTS		
EUT Model #:	NX-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538, z-wave and wi-fi				
Data File Name:	7293.dat			Page:	3 of 4

Measurement summary for limit1: FCC-B <1GHz 3m (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC-B <1GHz 3m
480.0 MHz	51.79 Qp	1.45 / 17.05 / 30.2 / 0.0	40.09	V / 1.10 / 10	-5.91
43.8 MHz	47.52 Qp	0.31 / 15.93 / 29.8 / 0.0	33.96	V / 1.00 / 0	-6.04
73.159 MHz	52.41 Qp	0.54 / 9.2 / 29.69 / 0.0	32.47	V / 1.00 / 0	-7.53
56.75 MHz	48.86 Qp	0.41 / 12.28 / 29.7 / 0.0	31.85	V / 1.00 / 180	-8.15
87.45 MHz	52.23 Qp	0.66 / 7.79 / 29.7 / 0.0	30.97	V / 1.00 / 0	-9.03
900.0 MHz	39.73 Qp	2.54 / 22.4 / 29.61 / 0.0	35.06	V / 1.00 / 0	-10.94
240.0 MHz	50.86 Qp	1.15 / 11.85 / 29.7 / 0.0	34.16	V / 1.00 / 180	-11.84
250.0 MHz	50.51 Qp	1.17 / 12.23 / 29.76 / 0.0	34.16	H / 1.20 / 200	-11.84
600.0 MHz	43.45 Qp	1.65 / 18.8 / 30.12 / 0.0	33.78	V / 1.00 / 0	-12.22
720.0 MHz	40.72 Qp	1.87 / 20.63 / 30.12 / 0.0	33.1	V / 1.00 / 270	-12.9
45.55 MHz	40.91 Qp	0.32 / 15.35 / 29.8 / 0.0	26.78	V / 1.00 / 90	-13.22
47.8 MHz	41.35 Qp	0.34 / 14.72 / 29.73 / 0.0	26.68	V / 1.00 / 0	-13.32
111.55 MHz	48.98 Qp	0.82 / 9.64 / 29.7 / 0.0	29.73	V / 1.00 / 180	-13.77
110.805 MHz	48.51 Qp	0.81 / 9.58 / 29.7 / 0.0	29.2	V / 1.00 / 0	-14.3
75.15 MHz	45.42 Qp	0.56 / 8.93 / 29.7 / 0.0	25.21	V / 1.00 / 0	-14.79
625.0 MHz	39.79 Qp	1.7 / 19.7 / 30.18 / 0.0	31.01	V / 1.00 / 0	-14.99
375.0 MHz	41.81 Qp	1.33 / 15.5 / 30.0 / 0.0	28.64	V / 1.00 / 0	-17.36
143.25 MHz	41.65 Qp	0.9 / 9.74 / 29.75 / 0.0	22.53	V / 1.00 / 0	-20.97
1.0 GHz	35.5 Qp	3.01 / 23.25 / 29.76 / 0.0	32.01	V / 1.00 / 180	-21.99
300.0 MHz	39.33 Qp	1.25 / 13.25 / 29.9 / 0.0	23.93	V / 1.00 / 0	-22.07
500.0 MHz	35.24 Qp	1.48 / 17.17 / 30.2 / 0.0	23.68	V / 1.00 / 180	-22.32
155.65 MHz	38.0 Qp	0.93 / 9.15 / 29.8 / 0.0	18.28	V / 1.00 / 180	-25.22
400.45 MHz	32.62 Qp	1.36 / 16.02 / 30.0 / 0.0	20.0	V / 1.00 / 0	-26.0
204.0 MHz	35.08 Qp	1.06 / 10.96 / 29.8 / 0.0	17.29	V / 1.00 / 180	-26.21
196.0 MHz	33.46 Qp	1.03 / 11.0 / 29.8 / 0.0	15.69	V / 1.00 / 180	-27.81

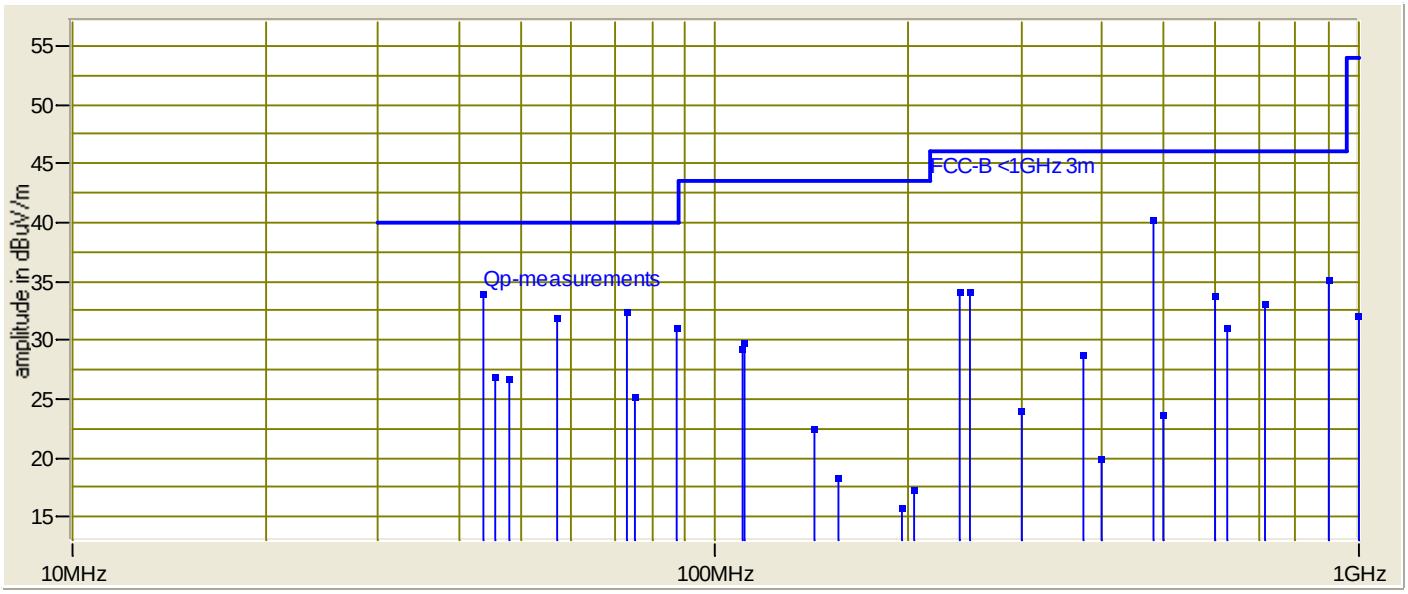
Tested by: Joel T Schneider (Printed) — Joel T. Schneider (Signature)

Reviewed by: Greg S Jakubowski (Printed) — G Jakubowski (Signature)

RADIATED EMISSIONS

Test Report #:	WC907293 Run 1	Test Area:	LTS		
EUT Model #:	NX-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538, z-wave and wi-fi				
Data File Name:	7293.dat			Page:	4 of 4

Graph:



Tested by: Joel T Schneider (Printed) — Joel T. Schneider (Signature)

Reviewed by: Greg S Jakubowski (Printed) — G Jakubowski (Signature)

RADIATED EMISSIONS

Test Report #:	WC907293 Run 2	Test Area:	LTS			
EUT Model #:	NX-801-IXT	Date:	9/24/2009			
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0	°C
Test Method:	FCC B			Air Pressure:	99.0	kPa
Customer:	GE Security			Rel. Humidity:	41.0	%
EUT Description:	Simon XT-IXT					
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538					
Data File Name:	7293re1below1g.dat			Page:	1 of 4	

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC B >1G 3 M peak	DELTA2 FCC B >1GHz 3m av
802.11\g low channel						
1.2 GHz	43.8 Pk	3.32 / 25.16 / 29.09 / 0.0	43.19	V / 1.00 / 0	-30.81	-10.81*
1.2 GHz	35.83 Av	3.32 / 25.16 / 29.09 / 0.0	35.22	V / 1.00 / 0	n/a	-18.78
1.2 GHz	41.83 Av	3.32 / 25.16 / 29.09 / 0.0	41.22	V / 1.00 / 270	n/a	-12.78
1.2 GHz	47.6 Pk	3.32 / 25.16 / 29.09 / 0.0	46.99	V / 1.00 / 270	-27.01	-7.01*
1.2 GHz	43.63 Av	3.32 / 25.16 / 29.09 / 0.0	43.02	V / 1.00 / 220	n/a	-10.98
1.2 GHz	47.0 Pk	3.32 / 25.16 / 29.09 / 0.0	46.39	V / 1.00 / 220	-27.61	-7.61*
no other signals detected on /g mid, high or \a low, mid, high up to 25 GHz						

*denotes peak reading vs. average limit

Tested by: Joel T. Schneider (Printed) Joel T. Schneider (Signature)

Reviewed by: Greg S Jakubowski (Printed) G Jakubowski (Signature)

RADIATED EMISSIONS

Test Report #:	WC907293 Run 2	Test Area:	LTS		
EUT Model #:	NX-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538				
Data File Name:	7293re1below1g.dat			Page:	2 of 4

Measurement summary for limit1: FCC B >1G 3 M peak (Pk)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC B >1G 3 M peak
1.2 GHz	47.6 Pk	3.32 / 25.16 / 29.09 / 0.0	46.99	V / 1.00 / 270	-27.01

Tested by: Joel T. Schneider (Printed) Joel T. Schneider (Signature)

Reviewed by: Greg S Jakubowski (Printed) G Jakubowski (Signature)

RADIATED EMISSIONS

Test Report #:	WC907293 Run 2	Test Area:	LTS		
EUT Model #:	NX-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538				
Data File Name:	7293re1below1g.dat			Page:	3 of 4

Measurement summary for limit2: FCC B >1GHz 3m av (Av)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA2 FCC B >1GHz 3m av
1.2 GHz	43.63 Av	3.32 / 25.16 / 29.09 / 0.0	43.02	V / 1.00 / 220	-10.98
1.2 GHz	47.6 Pk	3.32 / 25.16 / 29.09 / 0.0	46.99	V / 1.00 / 270	-7.01*

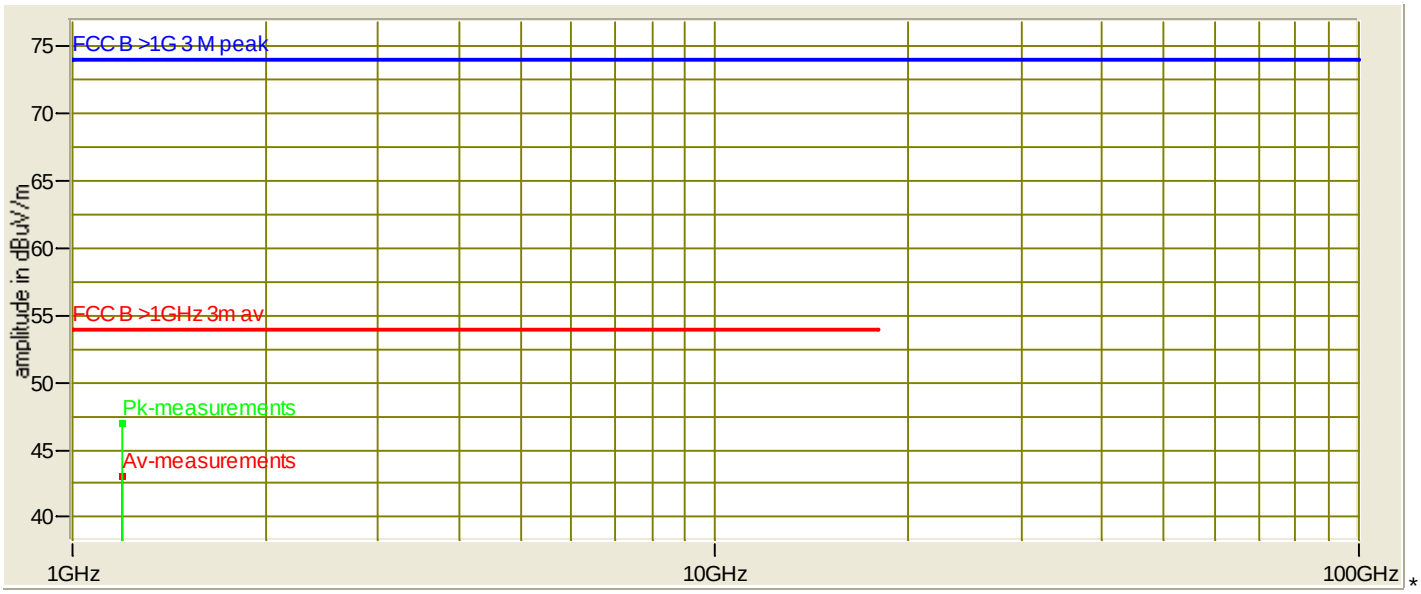
Tested by: Joel T. Schneider (Printed) Joel T. Schneider (Signature)

Reviewed by: Greg S Jakubowski (Printed) G Jakubowski (Signature)

RADIATED EMISSIONS

Test Report #:	WC907293 Run 2	Test Area:	LTS		
EUT Model #:	NX-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538				
Data File Name:	7293re1below1g.dat			Page:	4 of 4

Graph:



Tested by: Joel T. Schneider (Printed) _____ (Signature)

Reviewed by: Greg S Jakubowski (Printed) _____ (Signature)

Power spectral density
FCC 15.247(e), IC RSS-210 A8.2(b)

Test summary
The requirements are: ■ - MET ☐ - NOT MET
Test was performed in accordance with the test procedure of FCC KDB Publication 558074
Maximum power spectral density is –5.41 dBm / 3 kHz

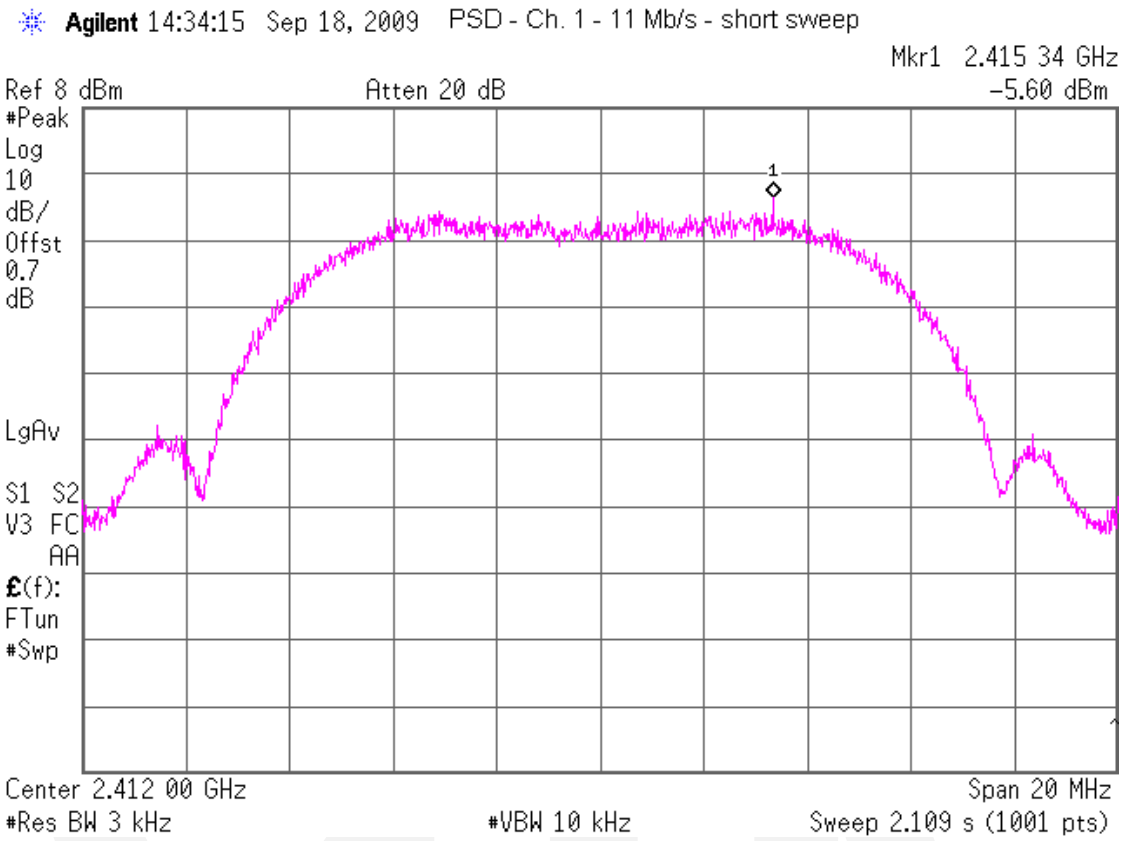
Test location
☐ - Wild River Lab Large Test Site (Open Area Test Site)
☐ - Wild River Lab Small Test Site (Open Area Test Site)
■ - Wild River Lab Tech Area, conducted measurement

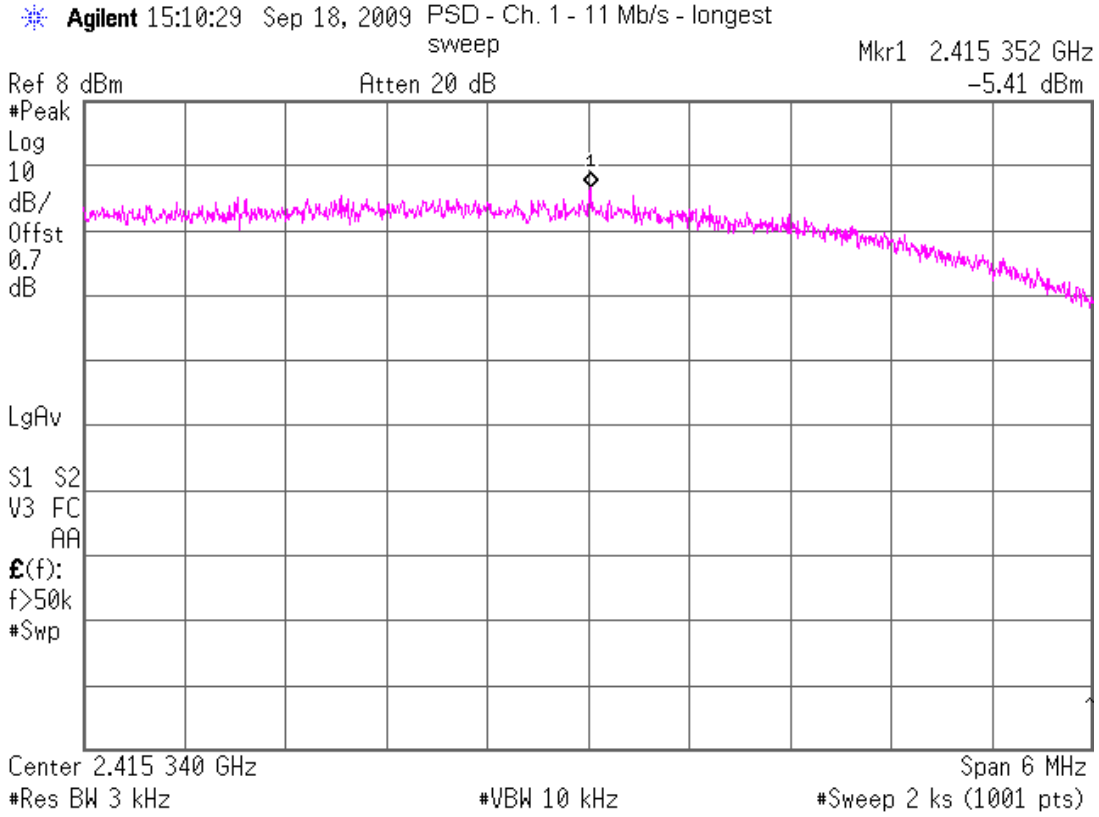
Test equipment

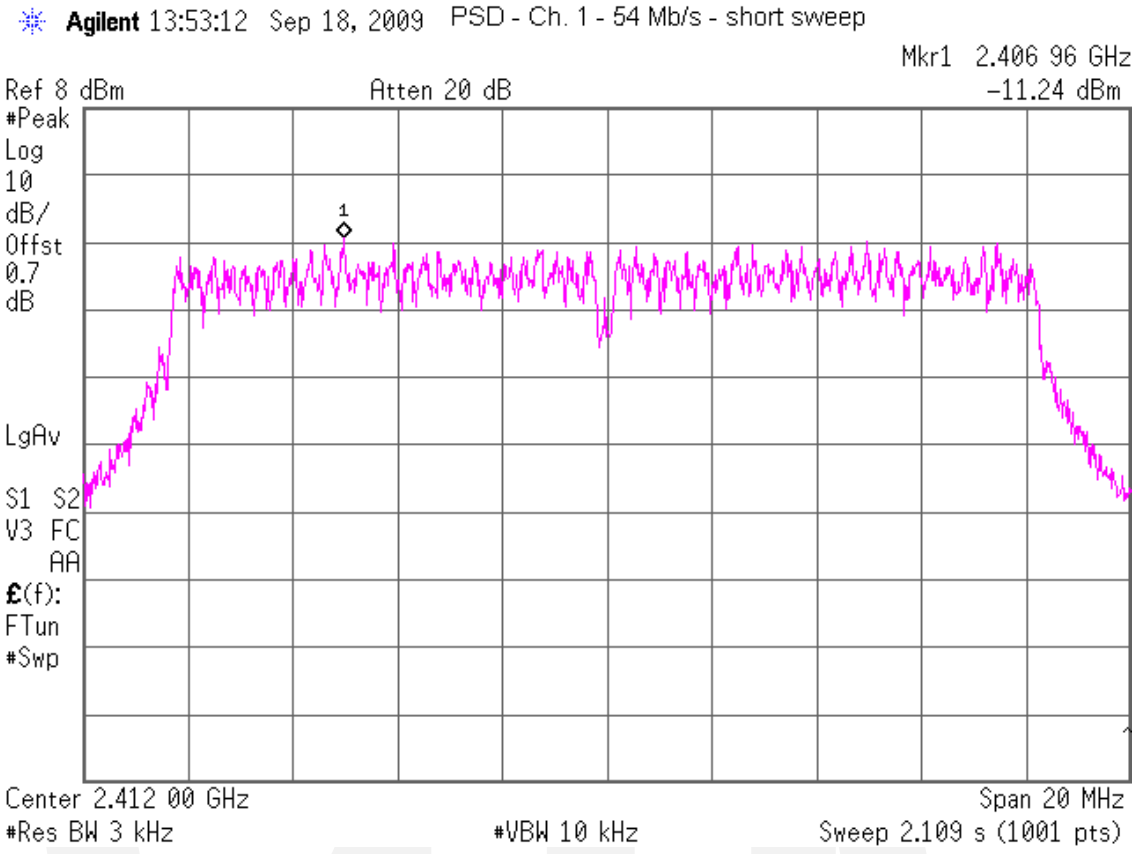
TUV ID	Model	Manufacturer	Description	Serial	Cal Due
WRLE03371	E4440A	Agilent	Spectrum Analyzer	MY43362222	11-Aug-10

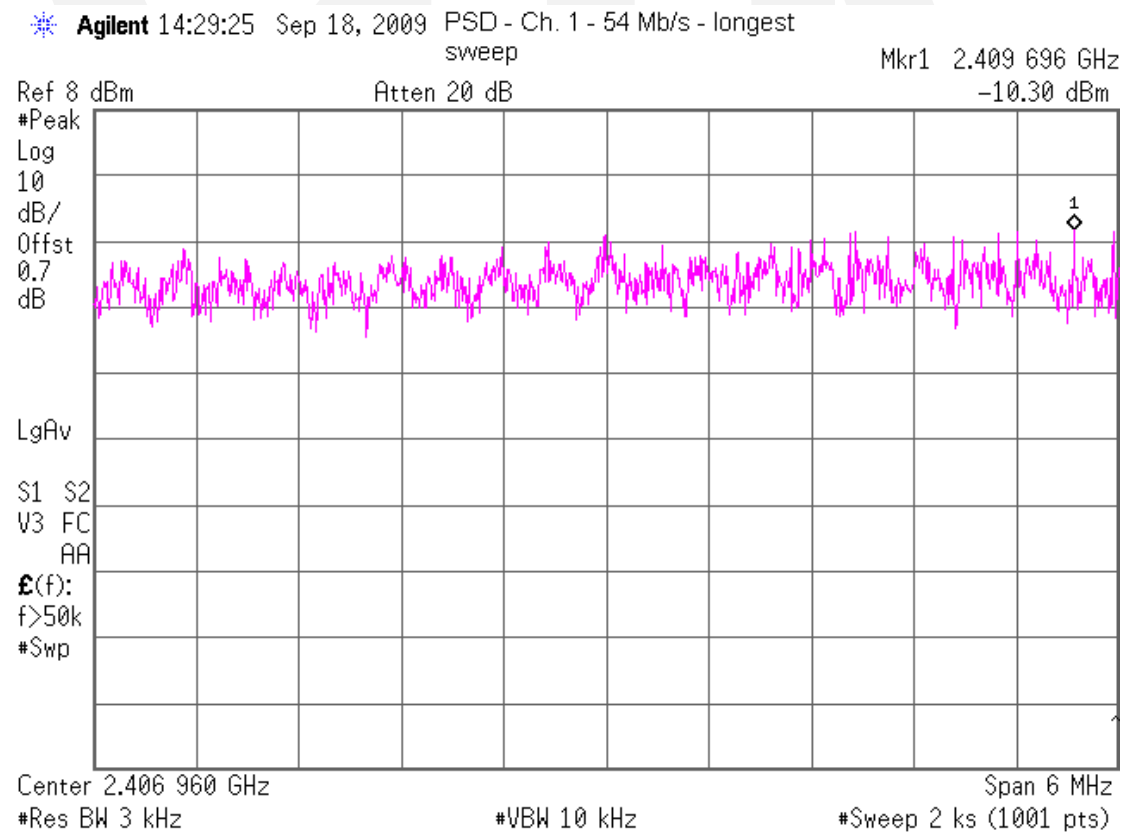
Test limit
No greater than 8 dBm in any 3 kHz band

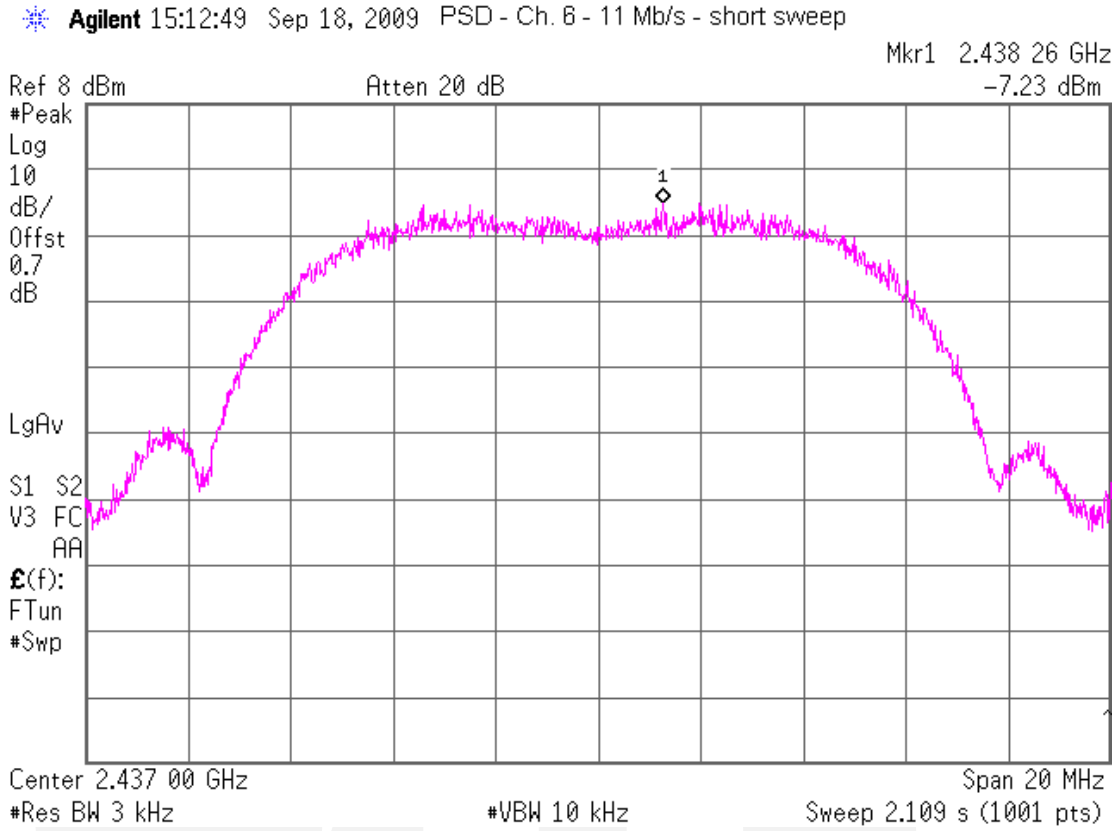
Test data
See following pages.

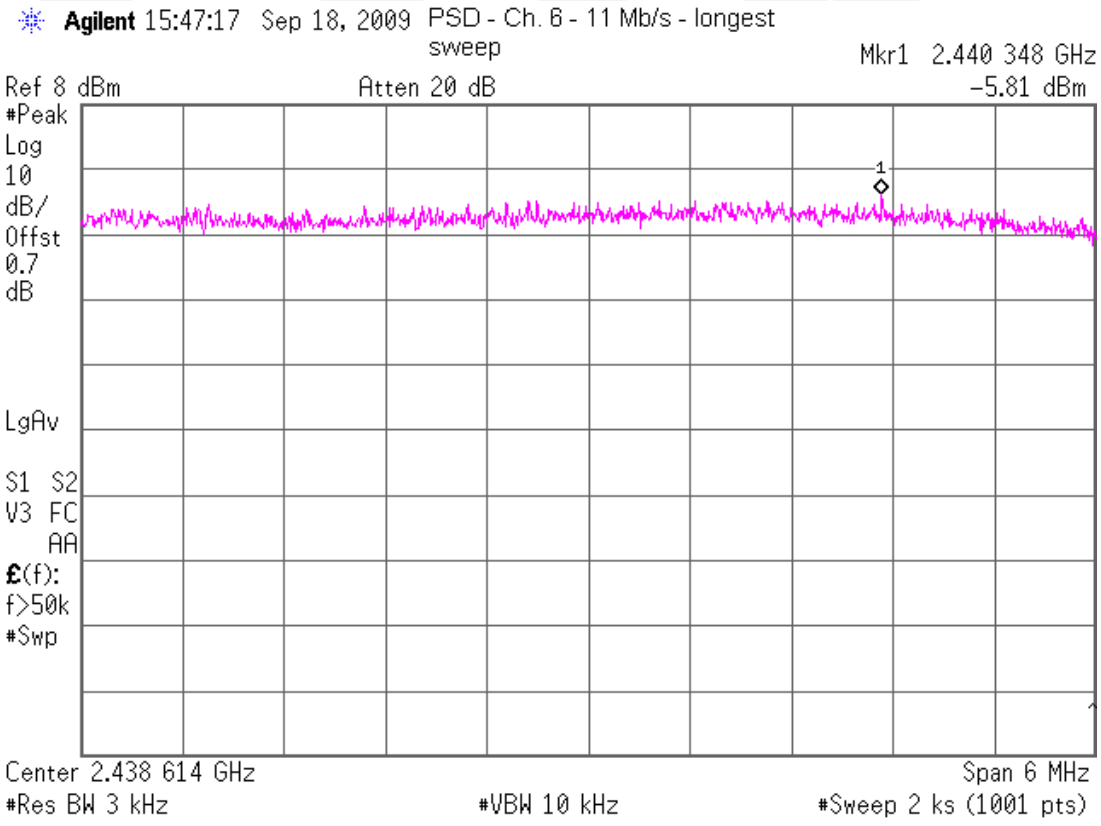

Agilent 14:34:15 Sep 18, 2009 PSD - Ch. 1 - 11 Mb/s - short sweep
Mkr1 2.415 34 GHz
-5.60 dBm
Ref 8 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
FTun
#Swp
Center 2.412 00 GHz
Span 20 MHz
#Res BW 3 kHz
#VBW 10 kHz
Sweep 2.109 s (1001 pts)

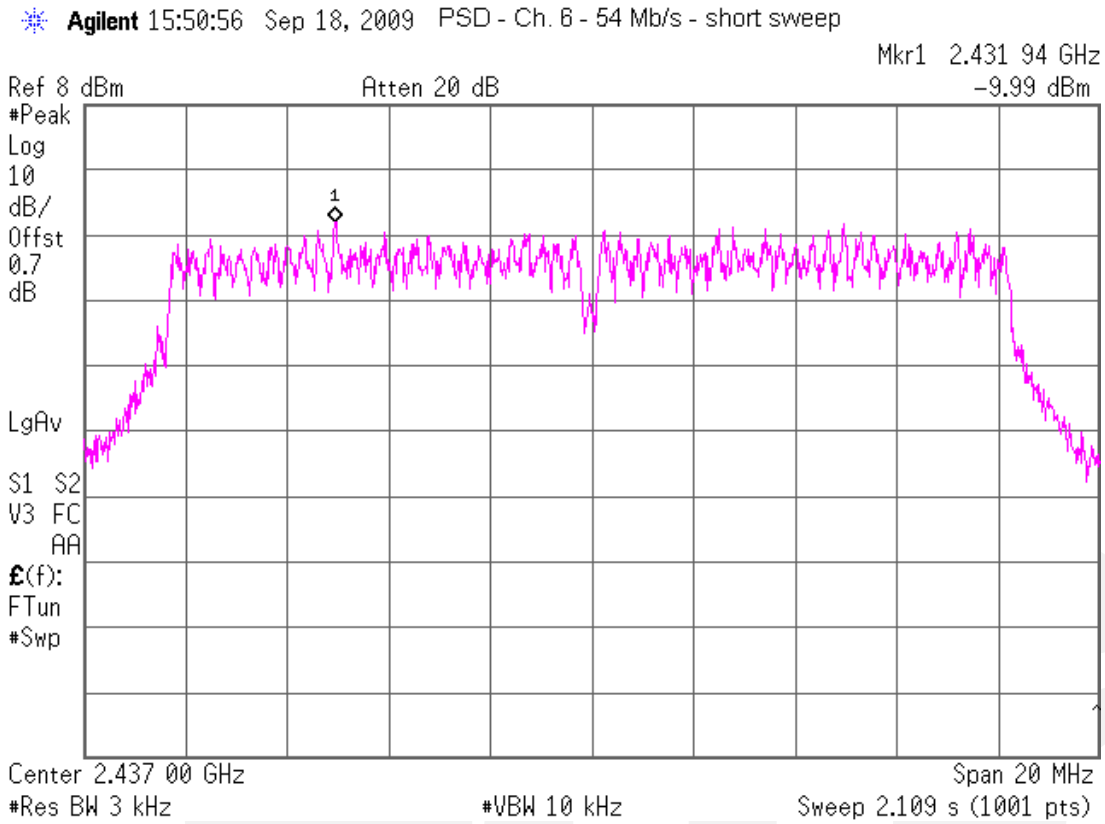

Agilent 15:10:29 Sep 18, 2009 PSD - Ch. 1 - 11 Mb/s - longest sweep
Mkr1 2.415 352 GHz
-5.41 dBm
Ref 8 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
f>50k
#Swp
Center 2.415 340 GHz
Span 6 MHz
#Res BW 3 kHz
#VBW 10 kHz
#Sweep 2 ks (1001 pts)

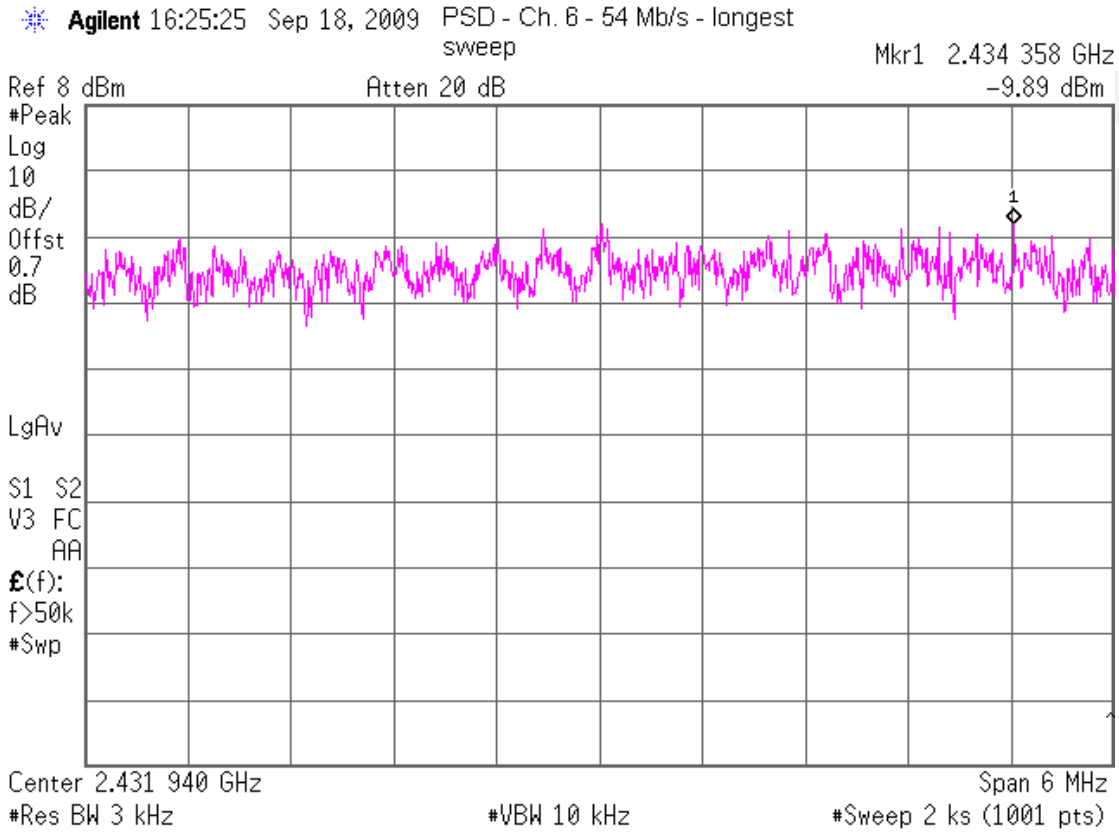

Agilent 13:53:12 Sep 18, 2009 PSD - Ch. 1 - 54 Mb/s - short sweep
Mkr1 2.406 96 GHz
-11.24 dBm
Ref 8 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
FTun
#Swp
Center 2.412 00 GHz
Span 20 MHz
#Res BW 3 kHz
#VBW 10 kHz
Sweep 2.109 s (1001 pts)

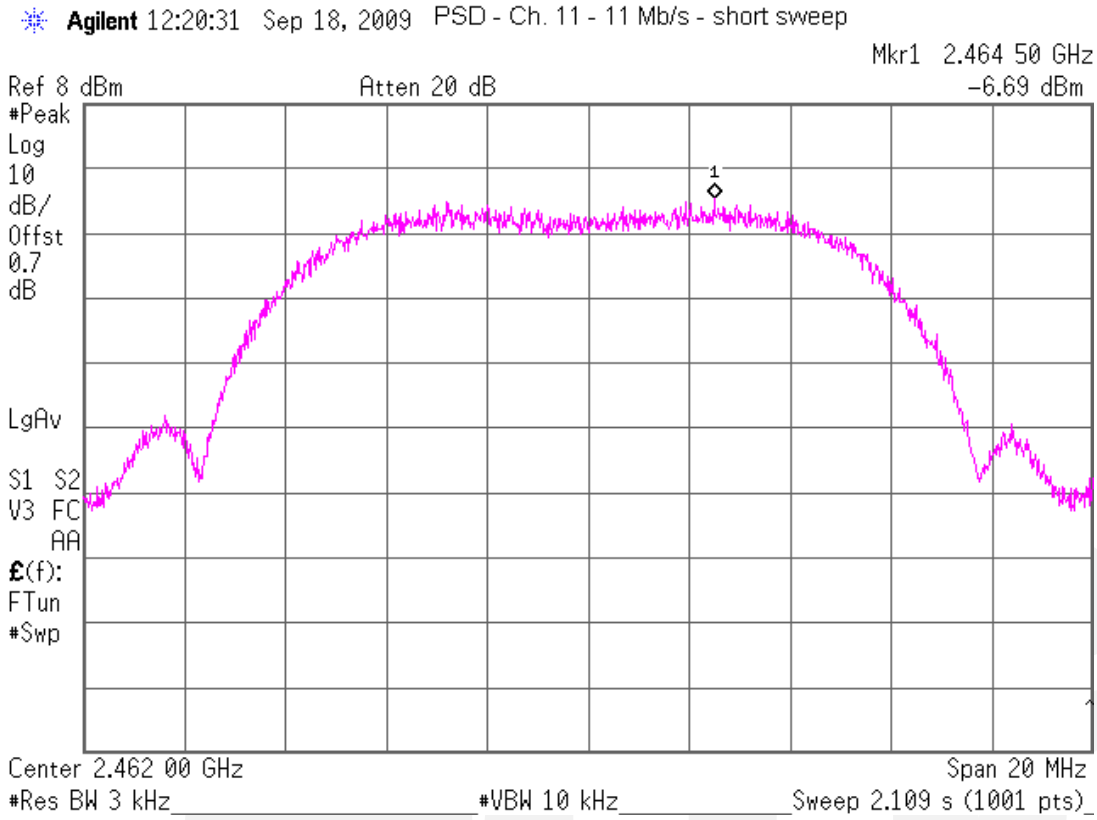

Agilent 14:29:25 Sep 18, 2009 PSD - Ch. 1 - 54 Mb/s - longest sweep
Mkr1 2.409 696 GHz
-10.30 dBm
Ref 8 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
f>50k
#Swp
Center 2.406 960 GHz
Span 6 MHz
#Res BW 3 kHz
#VBW 10 kHz
#Sweep 2 ks (1001 pts)

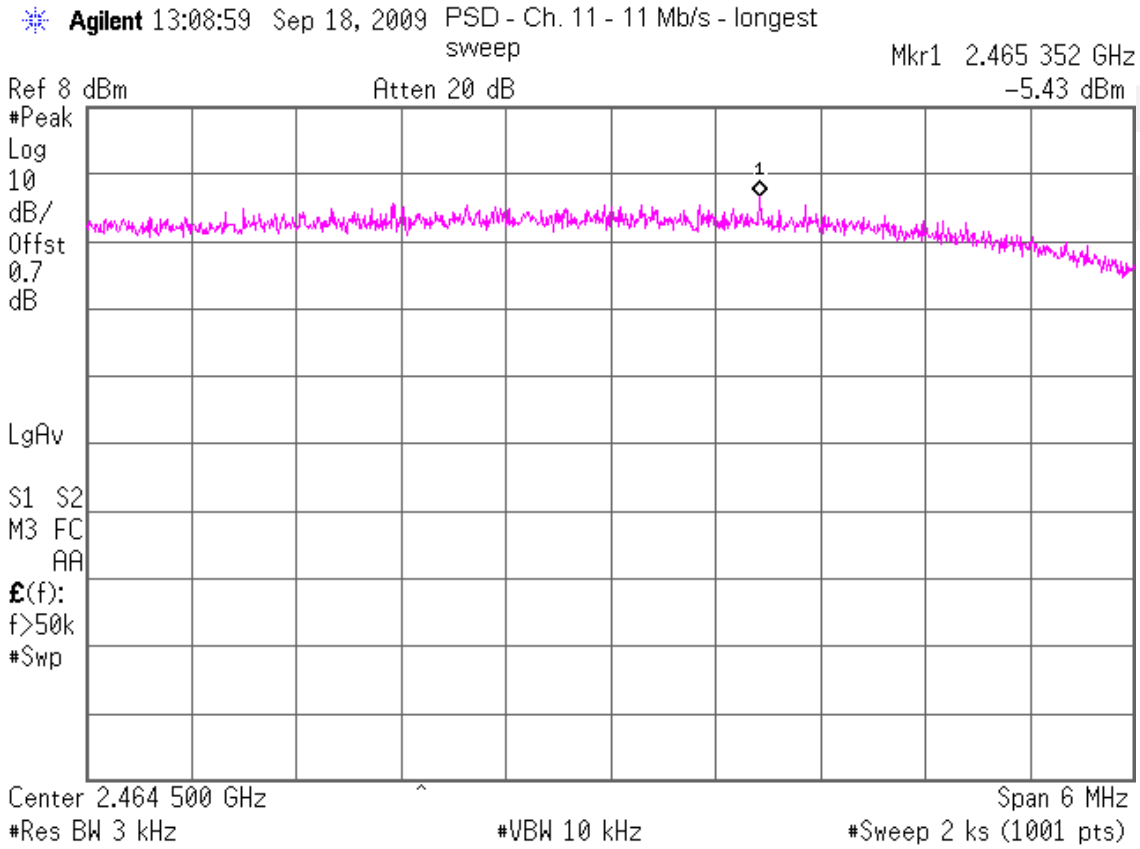

Agilent 15:12:49 Sep 18, 2009 PSD - Ch. 6 - 11 Mb/s - short sweep
Mkr1 2.438 26 GHz
-7.23 dBm
Ref 8 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
FTun
#Swp
Center 2.437 00 GHz
Span 20 MHz
#Res BW 3 kHz
#VBW 10 kHz
Sweep 2.109 s (1001 pts)

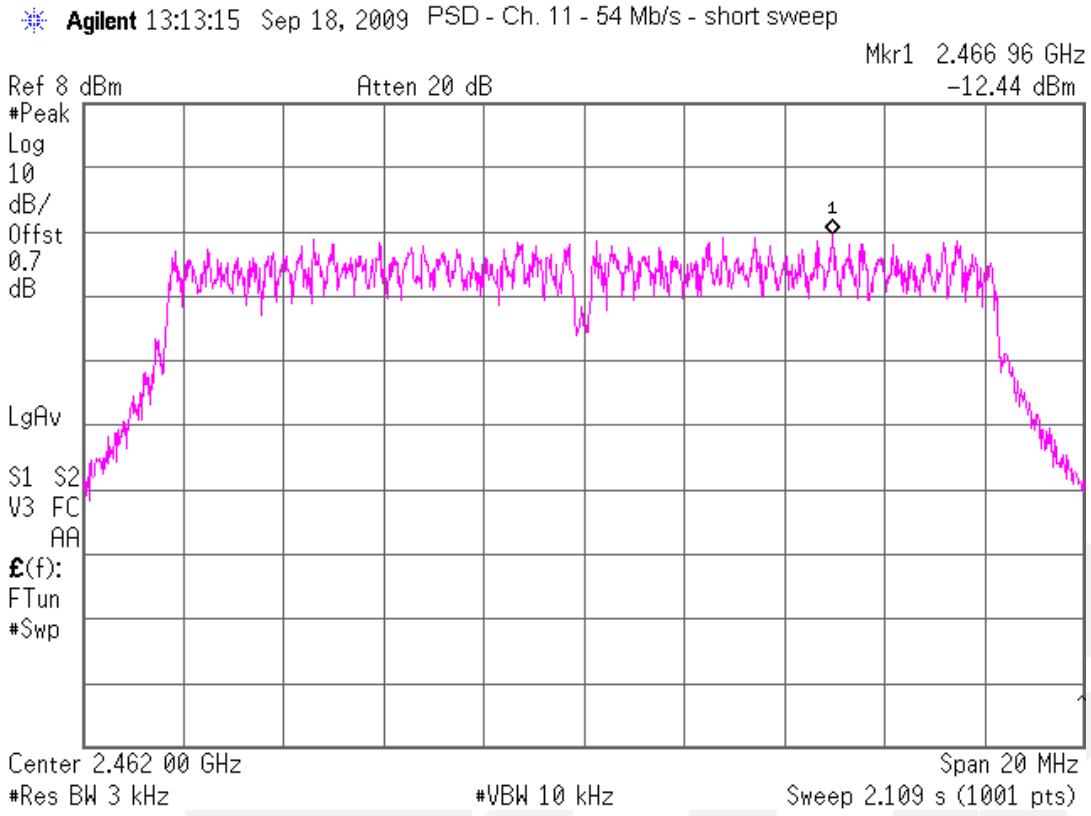

Agilent 15:47:17 Sep 18, 2009 PSD - Ch. 6 - 11 Mb/s - longest sweep
Mkr1 2.440 348 GHz
-5.81 dBm
Ref 8 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
f>50k
#Swp
Center 2.438 614 GHz
Span 6 MHz
#Res BW 3 kHz
#VBW 10 kHz
#Sweep 2 ks (1001 pts)

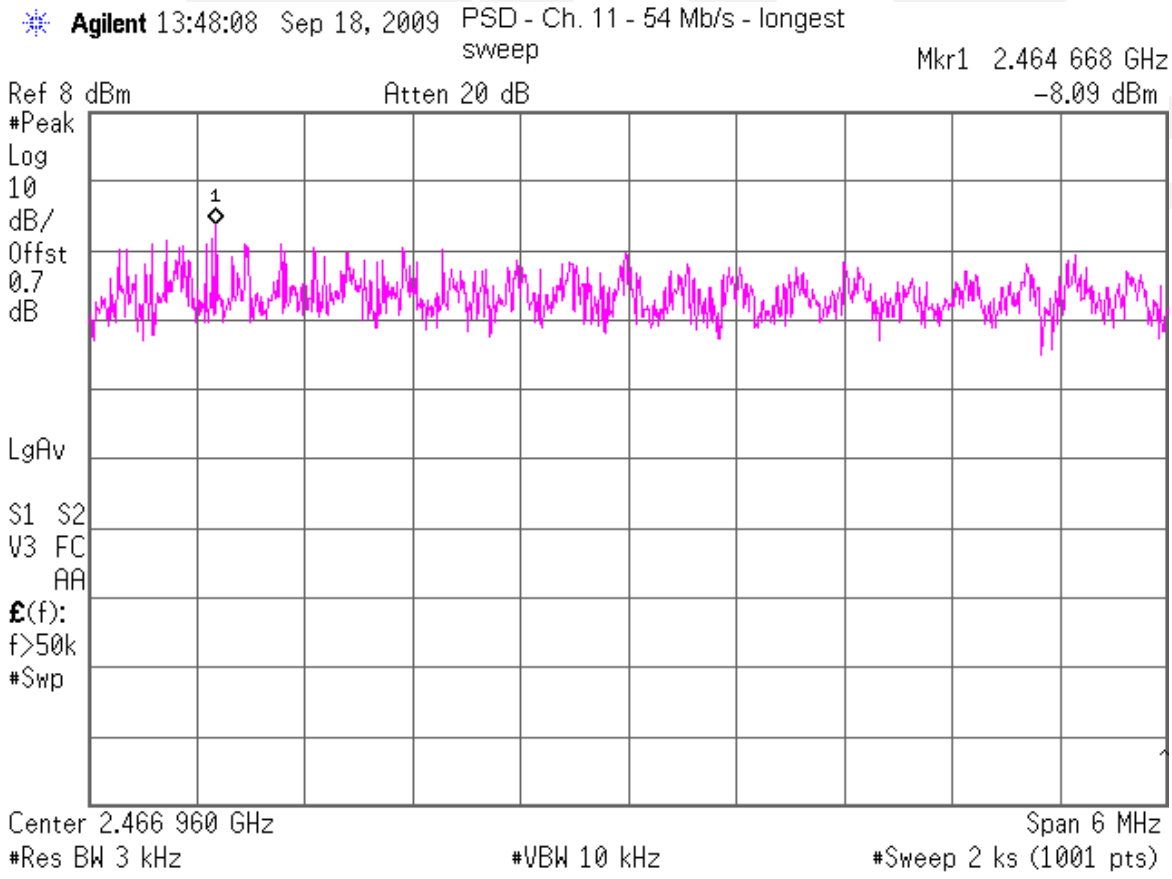

Agilent 15:50:56 Sep 18, 2009 PSD - Ch. 6 - 54 Mb/s - short sweep
Mkr1 2.431 94 GHz
-9.99 dBm
Ref 8 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
FTun
#Swp
Center 2.437 00 GHz
Span 20 MHz
#Res BW 3 kHz
#VBW 10 kHz
Sweep 2.109 s (1001 pts)


Agilent 16:25:25 Sep 18, 2009 PSD - Ch. 6 - 54 Mb/s - longest sweep
Mkr1 2.434 358 GHz
-9.89 dBm
Ref 8 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
f>50k
#Swp
Center 2.431 940 GHz
Span 6 MHz
#Res BW 3 kHz
#VBW 10 kHz
#Sweep 2 ks (1001 pts)


Agilent 12:20:31 Sep 18, 2009 PSD - Ch. 11 - 11 Mb/s - short sweep
Mkr1 2.464 50 GHz
Ref 8 dBm
Atten 20 dB
-6.69 dBm
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
FTun
#Swp
Center 2.462 00 GHz
Span 20 MHz
#Res BW 3 kHz
#VBW 10 kHz
Sweep 2.109 s (1001 pts)


Agilent 13:08:59 Sep 18, 2009 PSD - Ch. 11 - 11 Mb/s - longest sweep
Mkr1 2.465 352 GHz
Ref 8 dBm
Atten 20 dB
-5.43 dBm
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
M3 FC
AA
£(f):
f>50k
#Swp
Center 2.464 500 GHz
Span 6 MHz
#Res BW 3 kHz
#VBW 10 kHz
#Sweep 2 ks (1001 pts)


Agilent 13:13:15 Sep 18, 2009 PSD - Ch. 11 - 54 Mb/s - short sweep
Mkr1 2.466 96 GHz
-12.44 dBm
Ref 8 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
FTun
#Swp
Center 2.462 00 GHz
Span 20 MHz
#Res BW 3 kHz
#VBW 10 kHz
Sweep 2.109 s (1001 pts)


Agilent 13:48:08 Sep 18, 2009 PSD - Ch. 11 - 54 Mb/s - longest sweep
Mkr1 2.464 668 GHz
-8.09 dBm
Ref 8 dBm
Atten 20 dB
#Peak
Log
10
dB/
Offst
0.7
dB
LgAv
S1 S2
V3 FC
AA
£(f):
f>50k
#Swp
Center 2.466 960 GHz
Span 6 MHz
#Res BW 3 kHz
#VBW 10 kHz
#Sweep 2 ks (1001 pts)

Conducted emissions – AC power lines
FCC 15.207, IC RSS-Gen 7.2.2

Test summary
The requirements are: ■ - MET ☐ - NOT MET
Test was performed in accordance with the test procedures of ANSI C63.4 2003, clause 7.2
Minimum margin of compliance = 22 dB at 14.21 MHz (quasi-peak)
Minimum margin of compliance = 12 dB at 14.21 MHz (average)

Test location
■ - Wild River Lab Large Test Site (Open Area Test Site)
☐ - Wild River Lab Small Test Site (Open Area Test Site)
☐ - Wild River Lab Tech Area, conducted measurement

Test equipment

TUV ID	Model	Manufacturer	Description	Serial	Cal Due
WRLE02416	3825/2	Electro-Mechanics (EMCO)	50 Ω LISN	8812-1437	Code B 14-Jan-10
WRLE02534	ESHS-20	Rohde & Schwarz	EMI Receiver	837055/003	09-Apr-10

Cal Code B = Calibration verification performed internally.

Test limit

Frequncy (MHz)	Quasi-peak (dBμV)	Average (dBμV)
0.15 – 0.5	66 to 56*	56 to 46*
0.5 – 5	56	46
5 – 30	60	50

Test data
See following pages

CONDUCTED EMISSIONS

Test Report #:	WC907293 Run 3	Test Area:	LTS		
EUT Model #:	NA-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538, z-wave or wi-fi				
Data File Name:	7293re1below1g.dat			Page:	1 of 5

List of measurements for run #: 3

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
150.0 kHz	27.49 Qp	0.11 / 0.3 / 0.0 / 0.0	27.9	L1	-38.1	n/a
202.47 kHz	30.46 Qp	0.12 / 0.16 / 0.0 / 0.0	30.74	L1	-32.77	n/a
270.59 kHz	25.69 Qp	0.13 / 0.1 / 0.0 / 0.0	25.92	L1	-35.18	n/a
338.27 kHz	21.94 Qp	0.14 / 0.1 / 0.0 / 0.0	22.18	L1	-37.07	n/a
542.35 kHz	30.95 Qp	0.16 / 0.1 / 0.0 / 0.0	31.21	L1	-24.79	n/a
881.02 kHz	22.6 Qp	0.21 / 0.1 / 0.0 / 0.0	22.91	L1	-33.09	n/a
1.49 MHz	21.02 Qp	0.29 / 0.0 / 0.0 / 0.0	21.31	L1	-34.69	n/a
1.97 MHz	23.31 Qp	0.33 / 0.0 / 0.0 / 0.0	23.64	L1	-32.36	n/a
2.17 MHz	24.92 Qp	0.35 / 0.0 / 0.0 / 0.0	25.27	L1	-30.73	n/a
3.19 MHz	23.04 Qp	0.43 / 0.0 / 0.0 / 0.0	23.47	L1	-32.53	n/a
5.91 MHz	25.66 Qp	0.58 / 0.0 / 0.0 / 0.0	26.24	L1	-33.76	n/a
8.0 MHz	27.5 Qp	0.68 / 0.04 / 0.0 / 0.0	28.22	L1	-31.78	n/a
9.6 MHz	31.17 Qp	0.77 / 0.17 / 0.0 / 0.0	32.11	L1	-27.89	n/a
14.03 MHz	34.62 Qp	0.92 / 0.24 / 0.0 / 0.0	35.78	L1	-24.22	n/a
16.17 MHz	31.07 Qp	0.99 / 0.26 / 0.0 / 0.0	32.32	L1	-27.68	n/a
26.61 MHz	31.18 Qp	1.26 / 0.83 / 0.0 / 0.0	33.27	L1	-26.73	n/a
14.21 MHz	36.61 Qp	0.92 / 0.24 / 0.0 / 0.0	37.78	L1	-22.22	n/a
150.0 kHz	8.36 Av	0.11 / 0.3 / 0.0 / 0.0	8.77	L1	n/a	-47.23
202.47 kHz	25.34 Av	0.12 / 0.16 / 0.0 / 0.0	25.62	L1	n/a	-27.89
270.59 kHz	21.84 Av	0.13 / 0.1 / 0.0 / 0.0	22.07	L1	n/a	-29.03
338.27 kHz	18.52 Av	0.14 / 0.1 / 0.0 / 0.0	18.76	L1	n/a	-30.49
542.35 kHz	27.63 Av	0.16 / 0.1 / 0.0 / 0.0	27.89	L1	n/a	-18.11
881.02 kHz	18.35 Av	0.21 / 0.1 / 0.0 / 0.0	18.66	L1	n/a	-27.34
1.49 MHz	15.82 Av	0.29 / 0.0 / 0.0 / 0.0	16.11	L1	n/a	-29.89
1.97 MHz	17.1 Av	0.33 / 0.0 / 0.0 / 0.0	17.43	L1	n/a	-28.57
2.17 MHz	19.84 Av	0.35 / 0.0 / 0.0 / 0.0	20.19	L1	n/a	-25.81
3.19 MHz	13.82 Av	0.43 / 0.0 / 0.0 / 0.0	14.25	L1	n/a	-31.75
5.91 MHz	19.55 Av	0.58 / 0.0 / 0.0 / 0.0	20.13	L1	n/a	-29.87

Tested by: Joel T Schneider (Printed) — Joel T. Schneider (Signature)

Reviewed by: Robert J Behringer (Printed) — Robert Behringer (Signature)

CONDUCTED EMISSIONS

Test Report #:	WC907293 Run 3	Test Area:	LTS		
EUT Model #:	NA-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538, z-wave or wi-fi				
Data File Name:	7293re1below1g.dat			Page:	2 of 5

List of measurements for run #: 3

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
8.0 MHz	18.6 Av	0.68 / 0.04 / 0.0 / 0.0	19.32	L1	n/a	-30.68
9.6 MHz	29.84 Av	0.77 / 0.17 / 0.0 / 0.0	30.78	L1	n/a	-19.22
14.03 MHz	34.62 Av	0.92 / 0.24 / 0.0 / 0.0	35.78	L1	n/a	-14.22
14.21 MHz	35.94 Av	0.92 / 0.24 / 0.0 / 0.0	37.11	L1	n/a	-12.89
16.17 MHz	28.85 Av	0.99 / 0.26 / 0.0 / 0.0	30.1	L1	n/a	-19.9
26.61 MHz	27.1 Av	1.26 / 0.83 / 0.0 / 0.0	29.19	L1	n/a	-20.81
14.21 MHz	34.4 Qp	0.92 / 0.24 / 0.0 / 0.0	35.57	N	-24.43	n/a
14.21 MHz	33.6 Av	0.92 / 0.24 / 0.0 / 0.0	34.77	N	n/a	-15.23

Tested by: Joel T Schneider (Printed) _____ (Signature)

Reviewed by: Robert J Behringer (Printed) _____ (Signature)

CONDUCTED EMISSIONS

Test Report #:	WC907293 Run 3	Test Area:	LTS		
EUT Model #:	NA-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538, z-wave or wi-fi				
Data File Name:	7293re1below1g.dat			Page:	3 of 5

Measurement summary for limit1: EN55022 B Qp (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA1 EN55022 B Qp
14.21 MHz	36.61 Qp	0.92 / 0.24 / 0.0 / 0.0	37.78	L1	-22.22
14.03 MHz	34.62 Qp	0.92 / 0.24 / 0.0 / 0.0	35.78	L1	-24.22
542.35 kHz	30.95 Qp	0.16 / 0.1 / 0.0 / 0.0	31.21	L1	-24.79
26.61 MHz	31.18 Qp	1.26 / 0.83 / 0.0 / 0.0	33.27	L1	-26.73
16.17 MHz	31.07 Qp	0.99 / 0.26 / 0.0 / 0.0	32.32	L1	-27.68
9.6 MHz	31.17 Qp	0.77 / 0.17 / 0.0 / 0.0	32.11	L1	-27.89
2.17 MHz	24.92 Qp	0.35 / 0.0 / 0.0 / 0.0	25.27	L1	-30.73
8.0 MHz	27.5 Qp	0.68 / 0.04 / 0.0 / 0.0	28.22	L1	-31.78
1.97 MHz	23.31 Qp	0.33 / 0.0 / 0.0 / 0.0	23.64	L1	-32.36
3.19 MHz	23.04 Qp	0.43 / 0.0 / 0.0 / 0.0	23.47	L1	-32.53
202.47 kHz	30.46 Qp	0.12 / 0.16 / 0.0 / 0.0	30.74	L1	-32.77
881.02 kHz	22.6 Qp	0.21 / 0.1 / 0.0 / 0.0	22.91	L1	-33.09
5.91 MHz	25.66 Qp	0.58 / 0.0 / 0.0 / 0.0	26.24	L1	-33.76
1.49 MHz	21.02 Qp	0.29 / 0.0 / 0.0 / 0.0	21.31	L1	-34.69
270.59 kHz	25.69 Qp	0.13 / 0.1 / 0.0 / 0.0	25.92	L1	-35.18
338.27 kHz	21.94 Qp	0.14 / 0.1 / 0.0 / 0.0	22.18	L1	-37.07
150.0 kHz	27.49 Qp	0.11 / 0.3 / 0.0 / 0.0	27.9	L1	-38.1

Tested by: Joel T Schneider (Printed) — Joel T. Schneider (Signature)

Reviewed by: Robert J Behringer (Printed) — Robert Behringer (Signature)

CONDUCTED EMISSIONS

Test Report #:	WC907293 Run 3	Test Area:	LTS		
EUT Model #:	NA-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538, z-wave or wi-fi				
Data File Name:	7293re1below1g.dat			Page:	4 of 5

Measurement summary for limit2: EN55022 B Avg (Av)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA2 EN55022 B Avg
14.21 MHz	35.94 Av	0.92 / 0.24 / 0.0 / 0.0	37.11	L1	-12.89
14.03 MHz	34.62 Av	0.92 / 0.24 / 0.0 / 0.0	35.78	L1	-14.22
542.35 kHz	27.63 Av	0.16 / 0.1 / 0.0 / 0.0	27.89	L1	-18.11
9.6 MHz	29.84 Av	0.77 / 0.17 / 0.0 / 0.0	30.78	L1	-19.22
16.17 MHz	28.85 Av	0.99 / 0.26 / 0.0 / 0.0	30.1	L1	-19.9
26.61 MHz	27.1 Av	1.26 / 0.83 / 0.0 / 0.0	29.19	L1	-20.81
2.17 MHz	19.84 Av	0.35 / 0.0 / 0.0 / 0.0	20.19	L1	-25.81
881.02 kHz	18.35 Av	0.21 / 0.1 / 0.0 / 0.0	18.66	L1	-27.34
202.47 kHz	25.34 Av	0.12 / 0.16 / 0.0 / 0.0	25.62	L1	-27.89
1.97 MHz	17.1 Av	0.33 / 0.0 / 0.0 / 0.0	17.43	L1	-28.57
270.59 kHz	21.84 Av	0.13 / 0.1 / 0.0 / 0.0	22.07	L1	-29.03
5.91 MHz	19.55 Av	0.58 / 0.0 / 0.0 / 0.0	20.13	L1	-29.87
1.49 MHz	15.82 Av	0.29 / 0.0 / 0.0 / 0.0	16.11	L1	-29.89
338.27 kHz	18.52 Av	0.14 / 0.1 / 0.0 / 0.0	18.76	L1	-30.49
8.0 MHz	18.6 Av	0.68 / 0.04 / 0.0 / 0.0	19.32	L1	-30.68
3.19 MHz	13.82 Av	0.43 / 0.0 / 0.0 / 0.0	14.25	L1	-31.75
150.0 kHz	8.36 Av	0.11 / 0.3 / 0.0 / 0.0	8.77	L1	-47.23

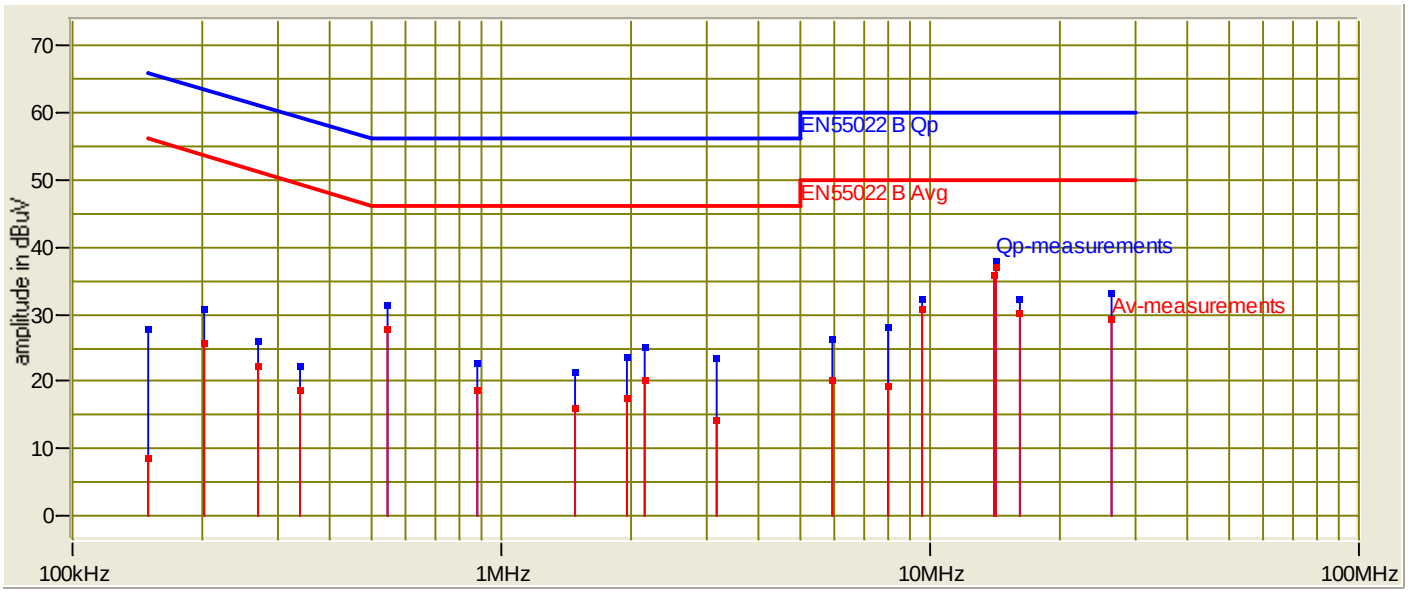
Tested by: Joel T Schneider (Printed) — Joel T. Schneider (Signature)

Reviewed by: Robert J Behringer (Printed) — Robert Behringer (Signature)

CONDUCTED EMISSIONS

Test Report #:	WC907293 Run 3	Test Area:	LTS		
EUT Model #:	NA-801-IXT	Date:	9/24/2009		
EUT Serial #:	00603504021F	EUT Power:	60 Hz 110 VAC	Temperature:	25.0 °C
Test Method:	FCC B			Air Pressure:	99.0 kPa
Customer:	GE Security			Rel. Humidity:	41.0 %
EUT Description:	Simon XT-IXT				
Notes:	shields used 444-1812-b, 444-1813-b, Simon base s/n 66225801355538, z-wave or wi-fi				
Data File Name:	7293re1below1g.dat			Page:	5 of 5

Graph:



Tested by: Joel T Schneider
Printed

Joel T. Schneider
Signature

Reviewed by: Robert J Behringer
Printed

Robert Behringer
Signature

TEST SETUP FOR EMISSIONS TESTING

WILD RIVER LAB
Large Test Site

Notes:

1. Items shown in dotted lines are located on the floor below the test area. It is 5 meters vertically from the ground floor to the test area.

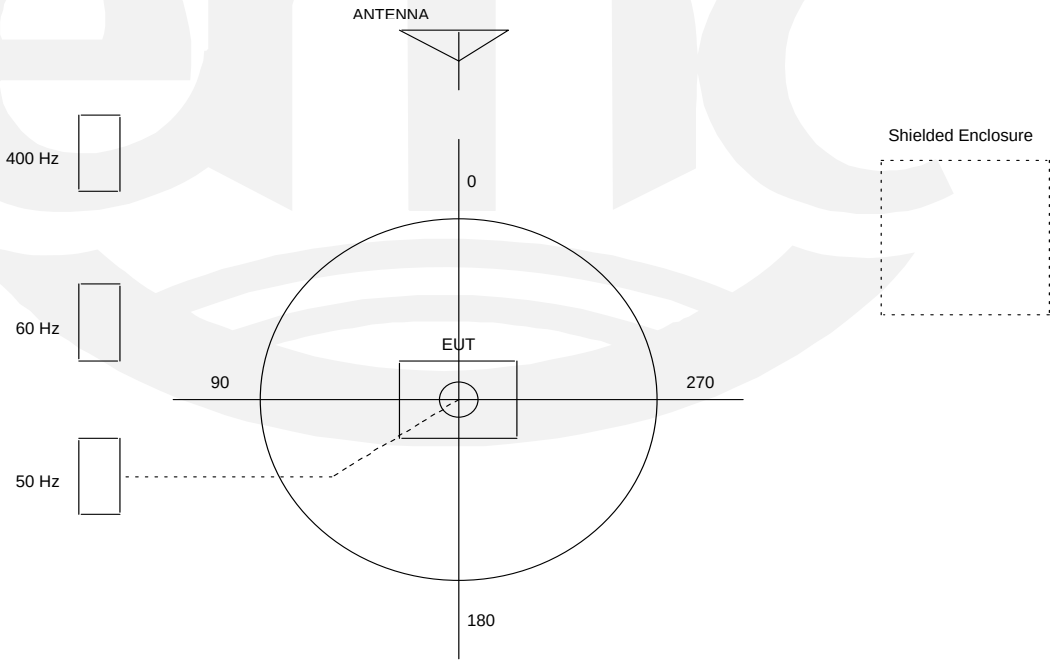
2. 50 Hz, 60 Hz, and 400 Hz are power panels for alternating current.

3. The antenna may be positioned horizontally 3, 10 or 30 meters from the center of the turntable.

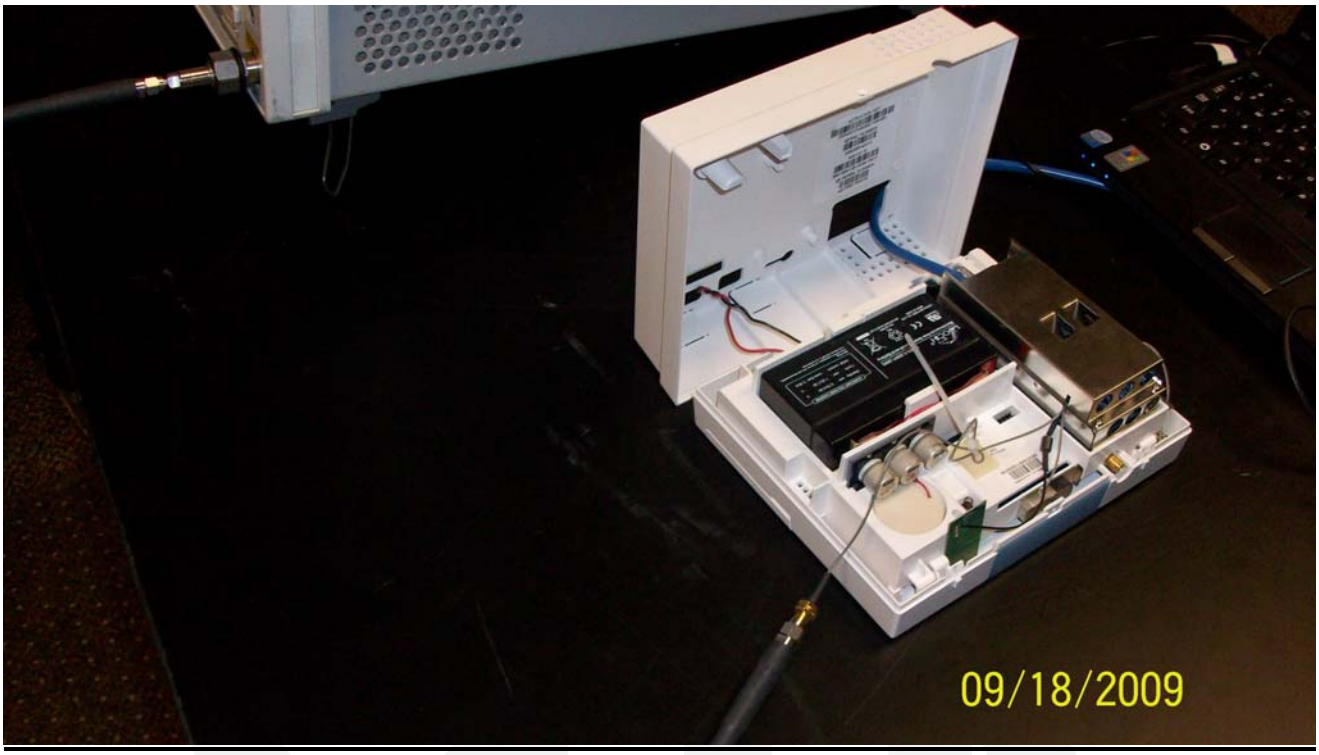
4. The circle is a 6.7 meter diameter turntable.

5. A ground plane is in the plane of this sheet.

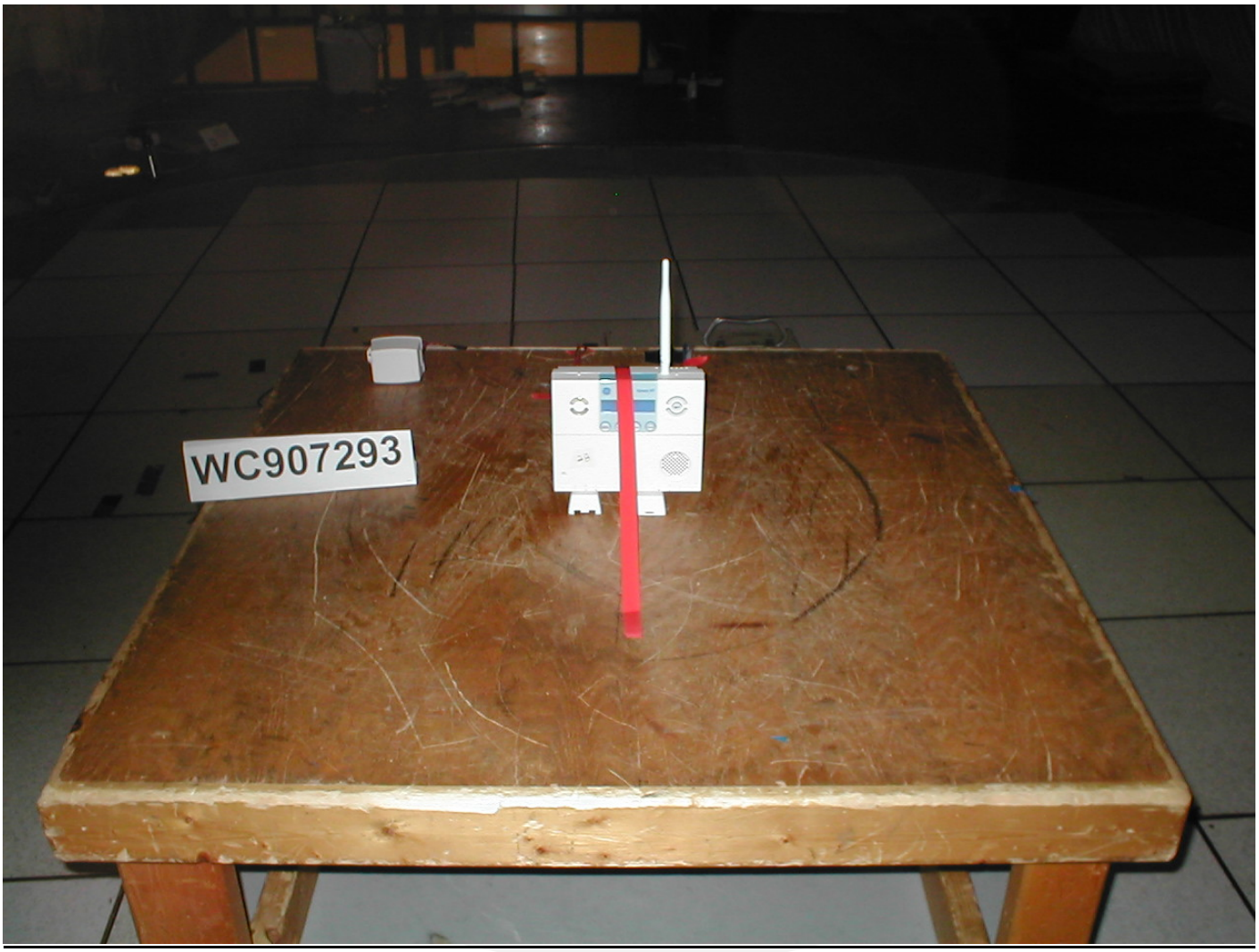
6. The test sample is shown in the azimuthal position representing zero degrees.



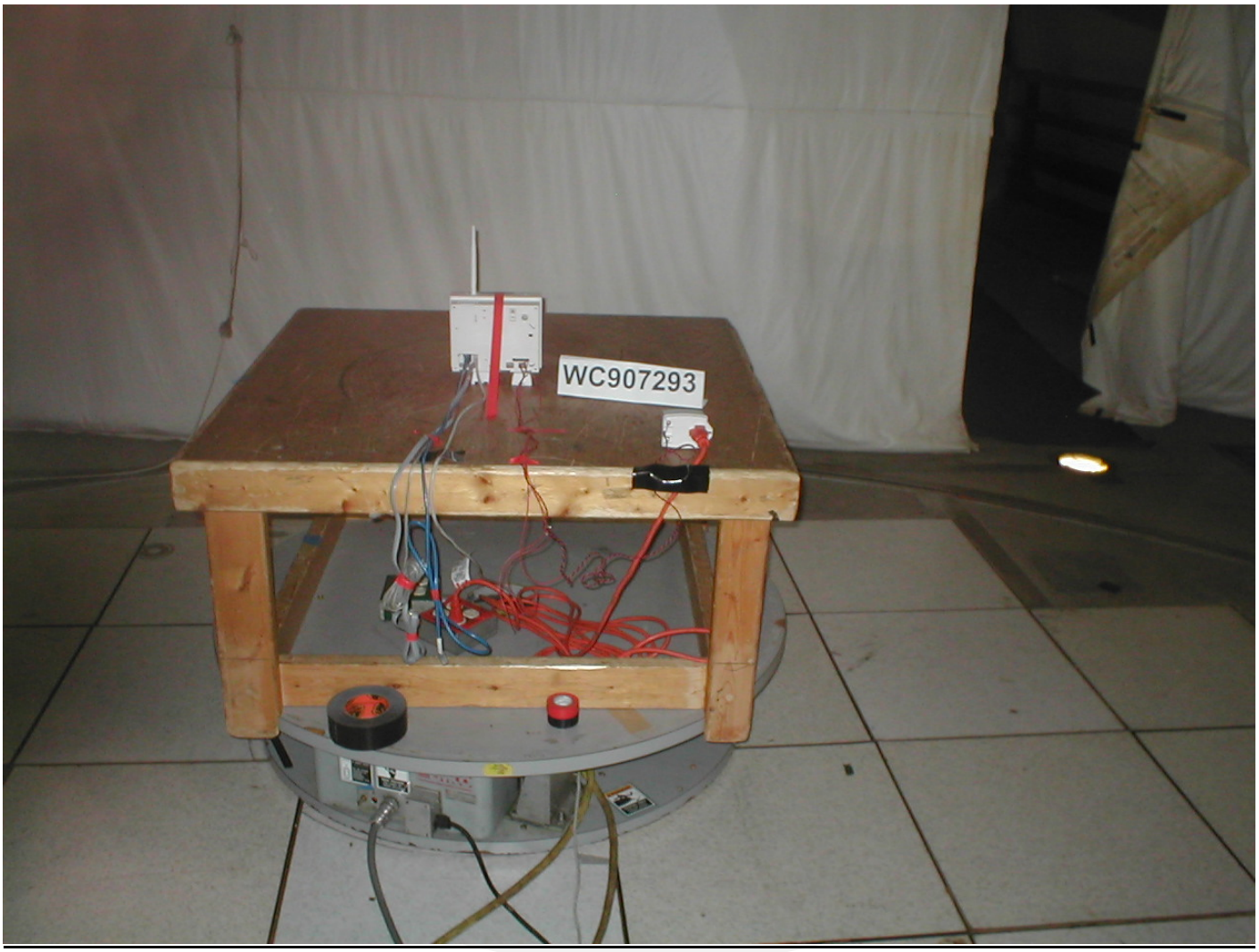
Test-setup photo(s):
Conducted measurements



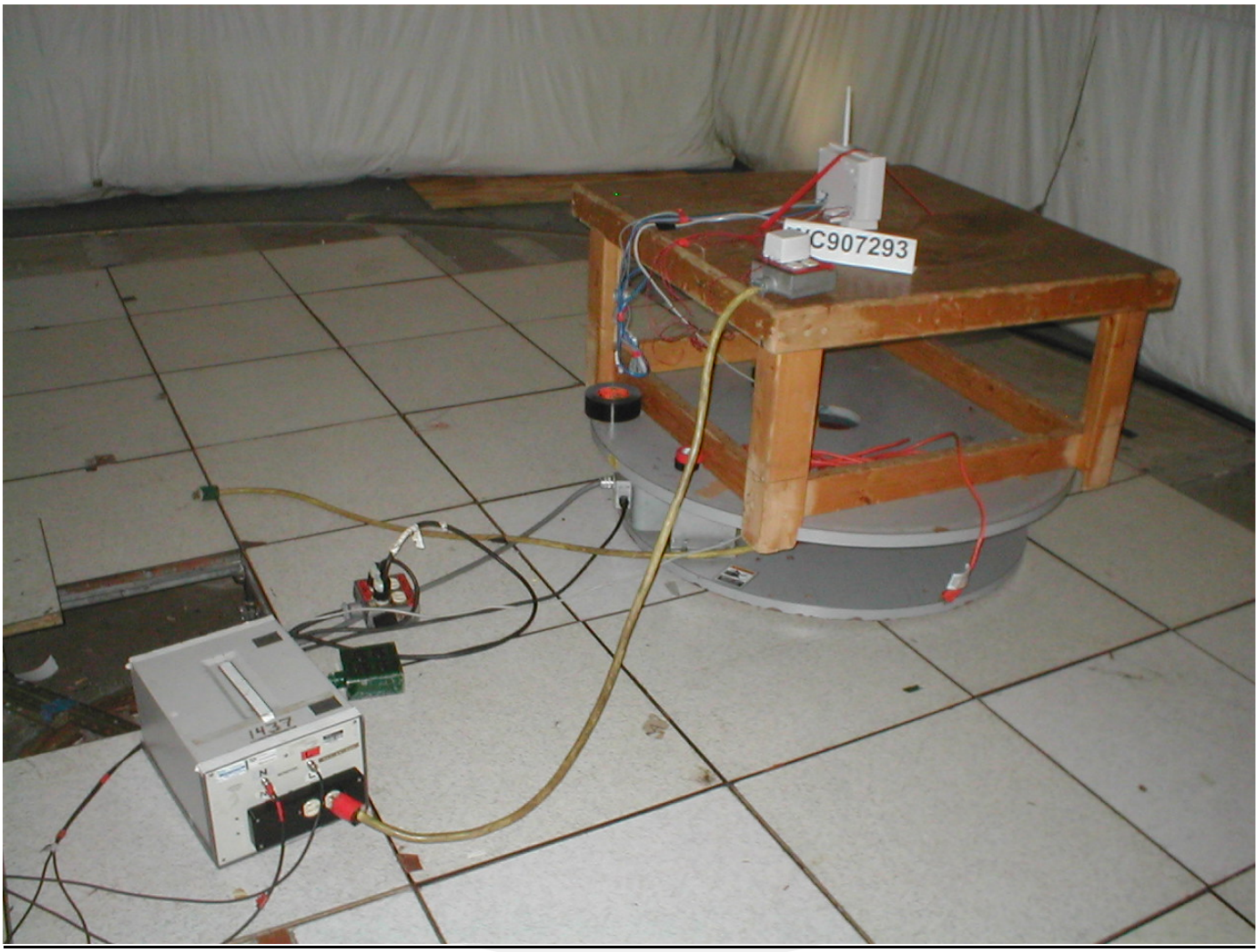
Test-setup photo(s):
Radiated measurements



Test-setup photo(s):
Radiated measurements



Test-setup photo(s):
Conducted measurements – AC power lines



Equipment Under Test (EUT) Test Operation Mode:

The device under test was operated under the following conditions during immunity testing :

☐ - Standby

☐ - Test program (H - Pattern)

☐ - Test program (color bar)

☐ - Test program (customer specific)

☐ - Practice operation

■ - Normal operating mode

■ - Fixed frequencies, channels (low, mid, high)

Configuration of the device under test:

■ - See Constructional Data Form in Appendix B

☐ - See Product Information Form(s) in Appendix B

The following peripheral devices and interface cables were connected during the measurement:

☐ - _____ Type : _____

☐ - _____ Type : _____

☐ - _____ Type : _____

☐ - _____ Type : _____

☐ - _____ Type : _____

☐ - _____ Type : _____

☐ - _____ Type : _____

☐ - _____ Type : _____

☐ - unshielded power cable

☐ - unshielded cables

☐ - shielded cables MPS.No.: _____

☐ - customer specific cables

☐ - _____

☐ - _____

GENERAL REMARKS:

Modifications required to pass:
■ None
☐ As indicated on the data sheet(s)

Test Specification Deviations: Additions to or Exclusions from:
■ None
☐ As indicated in the Test Plan
☐

SUMMARY:

The requirements according to the technical regulations are
■ - met and the equipment under test does fulfill the general approval requirements.
☐ - **not** met and the equipment under test does **not** fulfill the general approval requirements.

EUT Received Date:	18 September 2009
Condition of EUT:	Normal
Testing Start Date:	18 September 2009
Testing End Date:	01 October 2009

TÜV SÜD AMERICA INC

Tested by:

Greg Jakubowski
Senior EMC Technician

Approved by:

Joel T Schneider
Senior EMC Engineer

Appendix A

Constructional Data Form

Form

EMC Test Plan and Constructional Data Form

PLEASE COMPLETE THIS DOCUMENT IN FULL, ENTERING N/A IF THE FIELD IS NOT APPLICABLE. IF TESTING RESULTS IN MODIFICATIONS TO THE EQUIPMENT, PLEASE SUBMIT A REVISED TP/CDF INDICATING THOSE MODIFICATIONS.
NOTE: This information will be input into your test report as shown below. Press the F1 key at any time to get HELP for the current field selected.

Company:	GE Security Inc		
Address:	1275 Red Fox Road		
	Arden Hills		
	Minnesota, USA 55112		
Contact:	Rick Conner	Position:	Regulatory Compliance Leader
Phone:	651-779-4824	Fax:	651-779-4884
E-mail Address:	Rick.Conner@GE.com		

General Equipment Description -- ***NOTE: This information will be input into your test report as shown below.***

EUT Description	Residential Security System
EUT Name	Simon iXT
Model No.:	600-1054-95R-iXT Serial No.: Rev A
Product Options:	Transmiter - Receiver
Configurations to be tested:	Transmit - Recieve

Equipment Modification (*If applicable, indicate modifications since EUT was last tested. If modifications are made during this testing, submit revised TP/CDF after testing is complete.)*

Modifications since last test:	None
Modifications made during test:	None

Test Objective(s): ***Please indicate the tests to be performed, entering the applicable standard(s) where noted.***

- ☐ EMC Directive 2004/108/EC (EMC) Std: _____
- ☐ Machinery Directive 89/392/EEC (EMC) Std: _____
- ☐ Medical Device Directive 93/42/EEC (EMC) Std: _____
- ☐ Vehicle Directive: ☐ 2001/3/EC (EMC) ☐ 2004/104/EC (EMC)
  ☐ Other Vehicle Std: _____
- ☐ FDA Reviewers Guidance for Premarket Notification Submissions (EMC)

- ☒ FCC: Class ☐ A ☒ B Part 15
- ☐ VCCI: Class ☐ A ☐ B
- ☐ BSMI: Class ☐ A ☐ B (Separate Report)
- ☐ Canada: Class ☐ A ☒ B
- ☐ Australia: Class ☐ A ☐ B
- ☐ Other: _____

Third Party Certification, if applicable (*Signature on Page 6 Required)

- ☐ Attestation of Conformity (AoC)*
- ☐ Statement of Compliance (previously CoC)*
- ☐ EMC Certification (used with Octagon Mark)*
- ☐ Compliance Document*
- Protection Class (N/A for vehicles) ☐ Class I ☐ Class II ☐ Class III
  (Press **F1** when field is selected to show additional information on Protection Class.)
- ☒ FCC / TCB Certification
- ☐ E-Mark Certification
- ☒ Industry Canada / FCB Certification
- ☐ Taiwan Certification

EMC Test Plan and Constructional Data Form

Attendance

Test will be: ☒ Attended by the customer ☐ Unattended by the customer

Failure - *Complete this section if testing will not be attended by the customer.*

If a failure occurs, TÜV SÜD America should:

☐ Call contact listed above, if not available then stop testing. (After hrs phone): _____

☐ Continue testing to complete test series.

☐ Continue testing to define corrective action.

☐ Stop testing.

EUT Specifications and Requirements

Length: 7" Width: 2 3/4" Height: 5 3/4" Weight: 3 lbs.

Power Requirements

Regulations require testing to be performed at typical power ratings in the countries of intended use. (i.e., European power is typically 230 VAC 50 Hz or 400 VAC 50 Hz, single and three phase, respectively)

Voltage: 120 (If battery powered, make sure battery life is sufficient to complete testing.)

# of Phases: 1

Current (Amps/phase(max)): 0.30A Current (Amps/phase(nominal)): 0.30A

Other _____

Other Special Requirements

Typical Installation and/or Operating Environment

(ie. Hospital, Small Business, Industrial/Factory, etc.)

Residential

EUT Power Cable

☐ Permanent OR ☒ Removable Length (in meters): 1.5

☐ Shielded OR ☒ Unshielded

☐ Not Applicable

EMC Test Plan and Constructional Data Form

EUT Interface Ports and Cables

Type	Analog	Digital	During Test: Active	During Test: Passive	Qty	Shielding: Yes	Shielding: No	Shielding: Type	Termination	Connector Type	Port Termination	Length tested (in meters)	Removable	Permanent
EXAMPLE:														
RS232	☐	☒	☒	☐	*2*	☒	☐	*Foil over braid*	*Coaxial*	*Metallized 9-pin D-Sub*	*Characteristic Impedance*	*6*	☒	☐
Phone	☒	☐	☐	☒	1	☐	☒			4-pin phone		> 1m	☒	☐
Line	☐	☐	☐	☒	1	☐	☒			4-pin phone		> 1m	☒	☐
9V AC In	☒	☐	☒	☐	1	☐	☐		Twisted Pair	Screw-down		> 1m	☒	☐
9V AC In	☒	☐	☒	☐	1	☐	☒		Twisted Pair	Screw-down		> 1m	☒	☐
HW2 In	☐	☐	☐	☒	1	☐	☒		Single wire	Screw-down		> 1m	☒	☐
DC Out/HW 1 & 2	☒	☐	☐	☒	1	☐	☐		Single wire	Screw-down		> 1m	☒	☐
HW1 I/O	☐	☐	☐	☒	1	☐	☒		Single wire	Screw-down		> 1m	☒	☐
WAN	☐	☒	☐	☒	1	☐	☒		8-pin ethernet			> 1m	☒	☐
LAN	☐	☒	☒	☐	1	☐	☒		8-pin ethernet			10m	☒	☐
	☐	☐	☐	☐		☐	☐						☐	☐
	☐	☐	☐	☐		☐	☐						☐	☐
	☐	☐	☐	☐		☐	☐						☐	☐

EMC Test Plan and Constructional Data Form

EUT Software.

Revision Level: NA801_iXT_32M_trunk_r41_newbsp.bin

Description: Test firmware to allow WiFi to transmit at maximum power, select channel, and select data rate.

Equipment Under Test (EUT) Operating Modes to be Tested -- list the operating modes to be used during test. It is recommended the equipment be tested while operating in a typical operation mode. FCC testing of personal computers and/or peripherals requires that a simple program generate a complete line of upper case H's. Provide a general description of all software, firmware, and PLD algorithms used in the equipment. List all code modules as described above, with the revision level used during testing. Consult with your TÜV Product Service Representative if additional assistance is required.

1. WiFi OFDM (802.11g) 54Mbps transmit mode

2. WiFi DSSS-CCK (802.11b) 11Mbps transmit mode

3. ZWave continuous transmit mode at maximum data rate (40kbps)

Equipment Under Test (EUT) System Components -- List and describe all components which are part of the EUT. For FCC & Taiwan testing a minimum configuration is required. (ie. Mouse, Printer, Monitor, External Disk Drive, Motherboard, etc)

Description	Model #	Serial #	FCC ID #
SimonXT-iXT	600-1054-95R-iXT		
White GSM wand antenna	50-075		

EMC Test Plan and Constructional Data Form

Support Equipment -- List and describe all support equipment which is not part of the EUT. (i.e. peripherals, simulators, etc) This information is required for FCC & Taiwan testing.

Description	*Model #*	*Serial #*	*FCC ID #*
Lenovo IdeaPad Netbook	S9e	L3BZL4B	HFS-FL

Oscillator Frequencies

Manufacturer	*Frequency*	*Derived Frequency*	*Component # / Location*	*Description of Use*
	6MHz		Y5	
	8MHz		Y6	
	12MHz		Y2	
	25MHz		Y1	

Power Supply

Manufacturer	*Model #*	*Serial #*	*Type*
			☐ Switched-mode: (Frequency) _____ ☐ Linear ☐ Other: _____
			☐ Switched-mode: (Frequency) _____ ☐ Linear ☐ Other: _____

Power Line Filters

Manufacturer	*Model #*	*Location in EUT*

EMC Test Plan and Constructional Data Form

Critical EMI Components (Capacitors, ferrites, etc.)

Description	*Manufacturer*	*Part # or Value*	*Qty*	*Component # / Location*

EMC Critical Detail -- Describe other EMC Design details used to reduce high frequency noise.

PLEASE ENTER NAMES BELOW (INSERT ELECTRONIC SIGNATURE IF POSSIBLE)

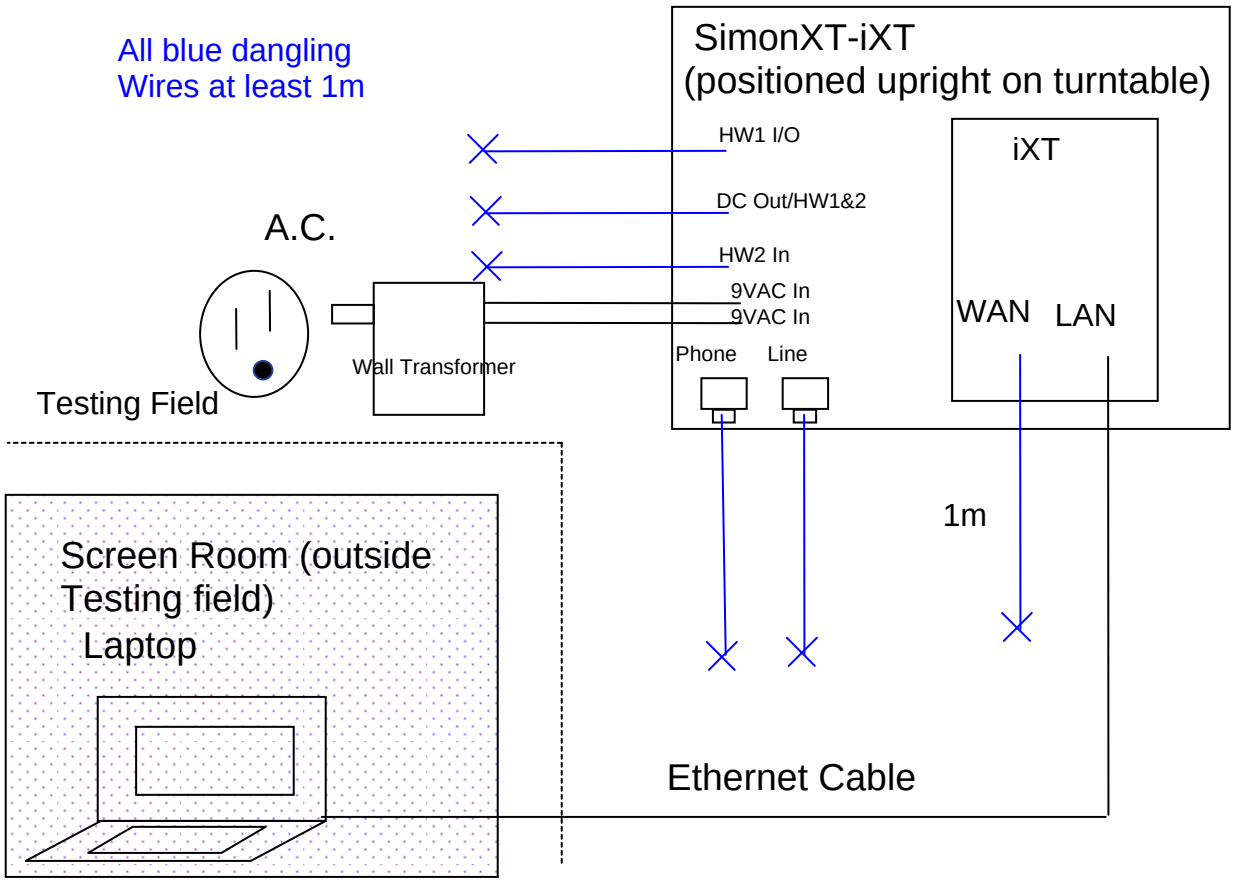
Authorization (Signature Required if a Third Party Certification is checked on pg 1)

Customer authorization to perform tests according to this test plan. — Date

Test Plan/CDF Prepared By (please print) — Date

EMC Block Diagram Form

System Configuration Block Diagram -- Provide a line drawing identifying the EUT, simulators, support equipment, I/O cables, power cables, and any other pertinent components to be used during testing. Use a dashed line to separate the equipment in the testing field versus equipment outside testing field.



Authorization Signatures

Customer authorization to perform tests according to this test plan.	Date
Test Plan/CDF Prepared By (please print)	Date

Appendix B

Measurement Protocol

MEASUREMENT PROTOCOL

GENERAL INFORMATION

Test Methodology

Emissions testing is performed according to the procedures in ANSI C63.4-2003.

Measurement Uncertainty

The test system for conducted emissions is defined as the LISN, tuned receiver or spectrum analyzer, and coaxial cable. The test system has a measurement uncertainty of ±1.8 dB. The test system for radiated emissions is defined as the antenna, the pre-amplifier, the spectrum analyzer and the coaxial cable. The test system has a measurement uncertainty of ±4.8 dB. The equipment comprising the test systems is calibrated on an annual basis.

Justification

The Equipment Under Test (EUT) is configured in a typical user arrangement in accordance with the manufacturer's instructions. A cable is connected to each available port and either terminated with a peripheral into its characteristic impedance or left unterminated. When appropriate, the cables are manually manipulated with respect to each other to obtain maximum emissions from the unit.

Conducted Emissions

The final level, in dBμV, equals the EMI receiver level plus the cable loss and LISN factor.

Radiated Emissions

The final level, in dBμV/m, equals the reading from the spectrum analyzer (Level dBμV), adding the antenna correction factor and cable loss factor (Factor dB) to it, and subtracting the preamp gain (and duty cycle correction factor, if applicable). This result then has the limit subtracted from it to provide the Delta, which gives the tabular data as shown in the data sheets in Attachment A. Intentional radiators are rotated through 3 orthogonal axes to determine the test position yielding the maximum emission levels.

Example:

FREQ (MHz)	LEVEL (dBuV)		CABLE/ANT/PREAMP (dB)	(dB/m)	(dB)	FINAL (dBuV/m)	POL	HGT (m)	AZ (deg)	DELTA1
60.80	42.5Qp	+	1.2	+ 10.9	- 25.5 =	29.1	V	1.0	0.0	-10.9

.

Test Equipment

All measurement instrumentation is traceable to the National Institute of Standards and Technology and is calibrated according to internal procedure.